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IN THE

Supreme Court of the United States

OCTOBER TERM, 1995

LUCIANO PEREGO AND TAPEMATIC S.P.A.,

Petitioners,

—v.—

KING INSTRUMENT CORPORATION,

Respondent.

ON PETITION FOR A WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

PETITION FOR A WRIT OF CERTIORARI

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168 pp

QUESTION PRESENTED

To recover lost profits under 35 U.S.C. § 284, must a patent holder practice the patented invention and prove that infringement caused its losses?

LIST OF PARTIES TO PROCEEDINGS BELOW

Petitioners (Defendants and Appellees/Cross-Appellants below) are Luciano Perego and Tapematic, S.p.A., a corporation with no parent or subsidiary having shares issued to the public.

Respondent (Plaintiff and Appellant below) is King Instrument Corp. On information and belief, King Instrument Corp. has been acquired by Otari, Corp.

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OPINIONS BELOW

The opinion of the Court of Appeals for the Federal Circuit (App. 2a-22a) is reported at 65 F.3d 941 (Fed.Cir. 1995). The opinion of the district court (App. 23a-38a) is reported at 737 F. Supp. 1227 (D.Mass. 1990). The unreported order of the Court of Appeals denying a petition for rehearing, with a dissenting opinion, is reproduced in the Appendix (App. 68a-71a).

JURISDICTION

The Court of Appeals for the Federal Circuit entered its judgment on September 19, 1995 (App. 1a). On December 5, 1995, the Court of Appeals for the Federal Circuit denied a petition for rehearing and suggestion for rehearing *en banc*. App. 68a.

The jurisdiction of this Court is invoked under 28 U.S.C. § 1254(1).

STATUTE INVOLVED

Section 284 of the Patent Act of 1952 (35 U.S.C. § 284) provides in relevant part:

> Upon finding for the claimant the court shall award the claimant damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer, together with interest and costs as fixed by the court.

STATEMENT OF THE CASE

Luciano Perego and Tapematic S.p.A. (collectively "Tapematic") manufactures equipment to load magnetic audio or video tape into closed cassettes. In 1983, King Instrument Corp. ("King") sued Tapematic for patent infringement in the United States District Court for the District of Massachusetts. Jurisdiction was based on 28 U.S.C. § 1338(a).

Throughout this action King asserted that Tapematic infringed three of King's patents. The district court rejected King's allegations of infringement as to two of these patents (the '153 and the '123 patents), which cover tape loading machines. The remaining patent, U.S. Patent No. 3,825,461 ("the '461 patent") claimed a specific device for connecting magnetic and leader tapes within a cassette known as a tape

splicing assembly. The district court found that Tapematic infringed this patent.

The portion of the only Tapematic product found to infringe the '461 patent was a tape splicer assembly that was an element of a reel changer. The reel changer could be used to substitute a new reel of tape when another reel ran out by splicing magnetic tape on magnetic tape so that the tape on the new reel could be automatically threaded through the tape loader. Tapematic sold the reel changer as an optional accessory for use in conjunction with its tape loader. App. 52a-54a. The cost of a tape loader was approximately $22,000, while the Tapematic reel changer cost roughly $400, less than 2% of the cost of the tape loader.

Although King manufactured tape loaders, it did not market a reel changer in competition with Tapematic's reel changer. Moreover, none of the King tape loaders—or any other King product—used the invention of the '461 patent. App. 9a. Neither party marketed a splicer assembly as a separate device. Tapematic used the splicer assembly only as a component of a larger device.

The district court declined to limit King's damages for infringement to a reasonable royalty under 35 U.S.C. § 284. Instead, the district court awarded King damages based on lost sales of King's tape loaders. In addition, the district court also awarded King a reasonable royalty on a portion of Tapematic's sales and lost profits on sales of spare parts for King's machines. Neither the tape loaders nor the spare parts for the tape loaders used the invention of the '461 patent.

The district court relied on a market share analysis to establish the measure of damages. App. 64a-66a. The court found that because King controlled 70% of the tape loader market, it would likely have made close to 70% of the sales made by Tapematic. App. 64a-65a.[1]

[1] For the remaining 30% of sales, the district court awarded King a reasonable royalty, which is not challenged here. App. 66a. The royalty

The Federal Circuit, *sua sponte*, voted to hear the case *en banc*. App. 72a. However, when the Court issued its recent *en banc* ruling in *Rite-Hite Corp. v. Kelly Co.*, 56 F.3d 1538 (Fed.Cir. 1995) (*en banc*), *cert. denied*, 116 S.Ct. 184 (1995), it remanded *Perego* to the original panel for determination in view of the decision in *Rite-Hite*. App. 73a. The Federal Circuit panel then affirmed, over a vigorous dissent by Judge Nies. App. 23a. The majority approved recovery of damages based on lost sales where there was no showing that the patentee had marketed a product using the infringed patent and no showing that the infringing activity affected sales. App. 22a.

Judge Nies in dissent argued that the majority's ruling substantially extended patent rights by allowing recovery of damages for infringement based on lost sales of products not covered by the infringed patent. App. 25a. The dissent explained that the majority decision ran contrary to the decisions of this Court and of other circuits, and ignored the well-settled requirements of the entire market value rule. App. 26a-27a. The dissent also explained that the majority had extended the rule recently announced *en banc* in *Rite-Hite*. App. 23a.

The Federal Circuit denied Tapematic's petition for rehearing and suggestion for rehearing *en banc* on December 5, 1995, with Chief Judge Archer and Judge Nies voting for rehearing. App. 68a. Judge Nies in her dissent explained that "damages may legally be obtained only for injury to patent rights . . . . A patent owner obtains no right from its patent to license goods in the public domain." App. 69a. In this case, she noted, the infringement claim served as "a device for exploitation of the patentee's market in unpatented goods." App. 69a-70a.

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was five percent of the sales price, or $1,100 per machine, for a total of $25,300 in royalties. App. 66a-67a. As to lost profits, the district court awarded damages of $14,400 for each of 49 machines, for a total of $705,600 in lost profits. App. 66a. The district court also awarded $176,000 in damages for lost profits on unpatented spare parts. *Id.*

Judge Nies went on to explain that the decision improperly extended the rule of *Rite-Hite*, which itself wrought a change of major significance:

> This court recently expanded legal injury for patent infringement to cover lost profits tied to a patent owner's business under a related patent. . . . I can only conclude that in denying *certiorari*, the Supreme Court had not been made aware of the significance of the fundamental change in patent rights made by the *Rite-Hite* decision. The *Rite-Hite* decision presents, in my view, the most profound departure from basic patent law concepts that any court has ever pronounced. Moreover, as the decision in this case indicates, the *Rite-Hite* decision was not an aberration—a one-time occurrence. *Rite-Hite* provides the jumping off place for further extensions of damages beyond injury to patent rights. If the constitutional power permits this perversion of patent infringement damages, and I believe it does not, it is for Congress to make this policy choice, not judges whose ruling rests on their own view that the remedies provided by Congress are inadequate recompense for patent infringement.

App. 71a. Finally, Judge Nies urged the court to obtain "the views of the Department of Justice on the constitutionality and antitrust implications of this ruling by the panel." *Id.*

REASONS FOR GRANTING THE PETITION

INTRODUCTION AND SUMMARY

In the decision below, the Federal Circuit rejected long-established precedent of this Court on an issue of major significance. The appeals court expanded the scope of damages available for infringement, allowing the patentee to recover lost profits not caused by infringement of the patent. In so doing, the court effectively extended the scope of patent rights.

The relevant fundamentals of patent law are quickly stated. A patent gives the patentee a legal right to a protected market in patented goods. The patentee may practice the patent, license the patent, or for that matter simply sit on the patent, and recover compensation under 35 U.S.C. § 284 of at least a reasonable royalty for any infringement. The patentee may not, however, recover as damages for infringement lost profits that are not caused by the infringement. Thus the patentee may not recover for reduced sales of products caused by the mere fact of competition rather than by patent infringement.

In this case, the Federal Circuit engaged in judicial legislation that significantly modified the Patent Act in two ways. First, the Federal Circuit allowed recovery for lost sales of a product that was not covered by the patent and not even directly competitive with the infringing product. Second, the court allowed recovery for infringement without any showing that the patented feature had any effect on sales of the product. The law on both these issues is well settled, and contrary to the result reached below.

The basic rule that recovery of lost profits as damages for patent infringement must be based on lost sales of a product incorporating the patented invention was explained by this Court over 100 years ago. *See Crosby Steam-Gage & Valve Co. v. Consolidated Safety-Valve Co.*, 141 U.S. 441, 452-453 (1891); *Yale Lock Mfg. Co. v. Sargent*, 117 U.S. 536, 552 (1886). Since then, the decisions of this Court and of the courts of appeals have been consistent with this rule, and statutory revisions of the Patent Act have in no way modified it.

It is just as settled that a patentee cannot recover lost profits based on sales of unpatented components in a machine that incorporates a patented device, unless the patentee shows that such losses are attributable to infringement of the patent. *See, e.g., Garretson v. Clark*, 111 U.S. 120, 121 (1884); *Seymour v. McCormick*, 16 How. 480, 489 (1853). This limitation is expressed in the doctrine known as the entire market value

rule. This rule, like the requirement that a patentee may recover lost profits only where it practices the patented invention, assures that patent rights are not extended to cover goods in the public domain.

In *Perego*, the Federal Circuit rejected both the entire market value rule and the requirement that a patentee seeking lost profits practice the patent, thereby extending patent rights far beyond their proper boundaries. The economic implications of its approach are sobering. A maker of car engines, who faces as a normal part of business the risk of inadvertently infringing a patent for a valve within the engine, would have this risk—and his potential liability—multiplied exponentially.

Under the *Perego* decision, if the engine maker were held to have infringed a valve patent held by General Motors, the maker would be held liable for GM's lost profits on entire engines, including GM engines that did not even contain the patented valve. The liability would exist even where use of the infringing valve in no way created the consumer demand for the infringing maker's engine. The infringing manufacturer could be held liable for lost sales of entire automobiles and further, even for sales of unpatented spare parts to the engine and automobile that in no way related to the patented valve.

In approving a rule allowing this absurd result, the *Perego* court rejected the damages remedies carefully fashioned by Congress and long accepted by the courts (a reasonable royalty or lost profits on patented goods) and adopted a new broader one to accord with its own idiosyncratic view of the public interest. It rejected not only this Court's authority, but also the well reasoned dissenting views of Judge Nies, and greatly expanded upon its problematic recent decision in *Rite-Hite*. Thus *Perego* cannot be dismissed as a mere aberration, but is part of a continuing pattern in which the Federal Circuit

has expanded patent protection far beyond the intent of Congress.

The issue presented urgently requires the attention of this Court. The Federal Circuit has exclusive jurisdiction over patent appeals from district courts throughout the country. 28 U.S.C. § 1295. Thus a major error in the Federal Circuit expanding the scope of patent rights has enormous implications for the nation as a whole. *Cf. Cardinal Chemical Co. v. Morton Int'l, Inc.*, 113 S.Ct. 1967, 1971 (1993) (nature of Federal Circuit's jurisdiction rendered its practice of vacating declaratory judgments of invalidity upon affirming a finding of non-infringement "a matter of special importance to the entire Nation").

ARGUMENT

The answer to the specific issue presented here—can economic losses not caused by patent infringement be awarded as damages for patent infringement—also answers a broader question: does a patent confer monopoly rights over goods in the public domain? Because these questions are tied together, this petition first describes the relevant basic principles of patent law, and then sets forth the settled law regarding damages for infringement. The petition then discusses the failure of the *Perego* majority to follow those basic principles and the majority's unfounded extension of the *Rite-Hite* decision.

I. PATENT RIGHTS DO NOT EXTEND PAST THE BOUNDS OF THE PATENT TO COVER GOODS IN THE PUBLIC DOMAIN

A. A PATENT CONFERS A LIMITED MONOPOLY

A patent gives the patentee a legal right for a limited term to a protected market for the patented goods. *See* 35 U.S.C. § 154. The right conferred by a patent is a legal monopoly.

See, e.g., Blonder-Tongue Lab., Inc. v. Univ. of Illinois Found., 402 U.S. 313, 343 (1971). As this Court has recognized, however, such a monopoly implicates the same public policies as a prohibited monopoly. *See id.* at 343. The patent monopoly, therefore, must be confined within its legal limits and cannot be expanded into markets for unpatented items. *See, e.g., id.*

This Court has consistently prohibited the enlargement of the patent monopoly beyond its legal scope, based on the public policy of fostering free competition as reflected in the antitrust laws. *See, e.g., Mercoid Corp. v. Mid-Continent Inv. Co.*, 320 U.S. 661, 666 (1944) ("The necessities or convenience of the patentee do not justify any use of the monopoly of the patent to create another monopoly."); *Morton Salt Co. v. G.S. Suppiger Co.*, 314 U.S. 488, 492 (1942) ("the public policy which includes inventions within the granted monopoly excludes from it all that is not embraced in the invention. It equally forbids the use of the patent to secure an exclusive right or limited monopoly not granted by the Patent Office and which it is contrary to public policy to grant."); *Ethyl Gasoline Corp. v. United States*, 309 U.S. 436, 459 (1940) ("The patent monopoly of one invention may no more be enlarged for the exploitation of a monopoly of another . . . than for the exploitation of an unpatented article.").

In short, the boundaries of a patent are determined by its terms, and extend no further. *See, e.g., Hilton Davis Chemical Co. v. Warner-Jenkinson Co., Inc.*, 62 F.3d 1512 (Fed.Cir. 1995) (*en banc*), *cert. granted*, 1995 U.S. WL 668878 (February 26, 1996) (Nies, J., dissenting). The patentee may practice the invention disclosed in the patent, or may grant exclusive or non-exclusive licenses. The patentee may also choose simply to exclude others from the relevant market. However, the damages that a patentee may recover for infringement are directly related to which of these options the patentee chooses.

B. PATENT DAMAGES MUST BE BASED ON LOSSES CAUSED BY THE INFRINGEMENT

The Patent Act allows patentees to receive "damages adequate to compensate for the infringement, but in no event less than a reasonable royalty . . ." 35 U.S.C. § 284. This Court has approved various approaches to compensation for infringement, but has always assured that damage awards are consistent with the underlying purposes of the Act. Thus this Court's cases prevent recovery for a patentee's losses that are not caused by infringement.

Two lines of decisions recognize and apply this basic requirement that only economic losses caused by infringement are directly compensable. First, a venerable line of authority makes clear that a patentee may not recover lost profits unless the patentee markets a product under its patent. Second, the entire market value rule speaks to the special situation of damages for infringement when a product combines both patented and unpatented features, and requires a showing that the patented device affected demand. These rules work together to assure that patents are not extended past their proper bounds.

1. THE LAW OF THIS COURT AND LOWER COURTS FIRMLY ESTABLISHES THAT A PATENTEE THAT DOES NOT PRACTICE A PATENT MAY RECOVER A REASONABLE ROYALTY, BUT MAY NOT RECOVER LOST PROFITS

It is, or should be, beyond dispute that a patentee may not obtain a damages award based only on commerce in goods not covered by its patent. This limitation on the scope of patent damages is embodied in the rule requiring, as a condition of recovering lost profits caused by infringement, that the patentee market the device claimed in the patent. Allowing the patentee to recover for other lost sales without practicing the

patented invention—that is, solely for lost sales of products not covered by the patent that has been infringed—is equivalent to granting patent protection to unpatented goods.

This Court has consistently, for more than a century and a half, adhered to and enforced this understanding of the limits of patent damages. The Court explained in *Crosby Steam-Gage & Valve Co. v. Consolidated Safety-Valve Co.*, 141 U.S. at 452, that to obtain as damages for infringement lost profits, it is a "material fact to be shown by the plaintiff that it was putting on the market goods embodying the [patented] invention."

Similarly, this Court made clear in *Yale Lock Mfg. Co. v. Sargent*, 117 U.S. at 552-553, that damages should be based on the extent to which the patentee uses his legal monopoly by commercializing his patented invention:

> As the plaintiff, at the time of the infringement, availed himself of his exclusive right by keeping his patent a monopoly, and granting no licenses, the difference between his pecuniary condition after the infringement and what his condition would have been had the infringement not occurred, is to be measured, *so far as his own sales of locks are concerned*, by the difference between the money he would have realized from *such sales* if the infringement had not interfered with such monopoly, and the money he did realize from *such sales*.

(Emphasis added.) *See also*, *Seymour v. McCormick*, 16 How. at 489 ("where the profit of the patentee consists neither in the exclusive use of the thing invented or discovered, nor in the monopoly of making it for others to use, it is evident that this rule [lost profits] could not apply").

Although the Patent Act was significantly revised in 1946 (with minor changes in 1952), the revisions did not undermine the authority of this Court's pronouncements on the requirements for recovering lost profits as patent damages. On the

contrary, the 1946 revisions reenacted the critical language of the Patent Act relating to damages and implicitly recognized the validity of this Court's prior analysis.

Prior to 1946, courts had recognized five possible bases of compensation for infringement. First, as previously discussed, the patentee could recover lost profits due to the infringement if it had maintained the patent monopoly for itself by practicing under the patent and by not freely licensing the invention. *Yale Lock Mfg.*, 117 U.S. at 552-53. Second, if the patentee licensed the invention freely, an infringer would be liable for the amount of the established royalty rate. Third, early cases held that a patentee who could not meet the standards to recover lost profits could recover only nominal damages. *See Keystone Mfg. Co. v. Adams*, 151 U.S. 139, 147 (1894). Fourth, Supreme Court case law established as an alternative to nominal damages a reasonable royalty. *Dowagiac Mfg. Co. v. Minnesota Moline Plow Co.*, 235 U.S. 641, 647-648 (1914). Finally, a patentee could seek an equitable accounting for the infringer's profits. *Id.* The remedies of nominal damages and an accounting for infringer's profits were eliminated in the 1946 revisions.

In the 1946 revisions, however, the 1946 Congress reenacted in 35 U.S.C. § 284 the remedy of "damages" that had existed in the patent statute since the early 1800's. *See Aro Mfg. Co., Inc. v. Convertible Top Replacement*, 377 U.S. 476, 505 (1964). The remedy of actual damages had been repeatedly interpreted in this Court's cases, as discussed above. *See, e.g., Yale Lock Mfg.*, 117 U.S. at 552-553.

Because the operative statutory language was reenacted, it is "appropriate to infer that Congress intended to adopt the established judicial interpretation." *General Motors Corp. v. Devex Corp.*, 461 U.S. 648, 653 (1983). This inference is strengthened by Congress's decision in 1946 to codify the judicially created remedy of a reasonable royalty. This Court had crafted the reasonable royalty remedy in part to assure

that a patentee who could not prove that infringement resulted in lost profits could still have a remedy. *See Dowagiac Mfg. Co.*, 235 U.S. 647-648. Congress in 1946 took the same approach, and instead of weakening the requirements established by this Court's cases for recovering lost profits, approved the fall-back remedy of a reasonable royalty.

Thus the 1946 revisions left in place the basic requirements previously established by this Court for recovering lost profits as damages. This conclusion is reinforced by the consistency of the decisions of the lower courts both before and after the 1946 revisions. Lower courts consistently followed this Court's directives permitting recovery of lost profits only in cases where the patentee practiced the patented invention—at least until the recent decisions by the Federal Circuit in *Rite Hite* and *Perego*. *See*, *Metallic Rubber Tire Co. v. Hartford Rubber Works, Co.*, 275 F. 315, 323-24 (2d Cir. 1921) *cert. denied* 257 U.S. 650 (1921); *Faulkner v. Gibbs*, 199 F.2d 635, 638 n.7 (9th Cir. 1952); *Electric Pipe Line, Inc. v. Fluid Sys. Inc.*, 250 F.2d 697, 699 (2d. Cir. 1957); *Trio Process Corp. v. L. Goldstein's Sons, Inc.*, 533 F.2d 126, 129 (3d Cir. 1976) *cert. denied, 449 U.S. 827 (1980)*; *Panduit Corp. v. Stahlin Bros. Fibre Work, Inc.*, 575 F.2d 1152, 1156 (6th Cir. 1978); *Devex Corp. v. General Motors Corp.*, 667 F.2d 347, 361 (3d Cir. 1981) *aff'd* 461 U.S. 648 (1983); *Baumstimler v. Rankin*, 677 F.2d 1061, 1072 (5th Cir. 1982); *Trell v. Marlee Elec. Corp.*, 912 F.2d 1443, 1445 (Fed.Cir. 1990); *McComb v. Brodie*, 15 F. Cas. 1290, 1294-95 (No. 8,708) (C.C.D. La. 1872); *Standard Mailing Machines Co. v. Postage Meter Co.*, 31 F.2d 459, 461-62 (D. Mass 1929); *Ellipse Corp. v. Ford Motor Co.*, 461 F.Supp. 1354, 1379 (N.D. Ill. 1978) *aff'd* 614 F.2d 775 (7th Cir. 1979) *cert. denied* 446 U.S. 939 (1980); *Saf-Gard Prod., Inc. v. Service Parts, Inc.*, 491 F.Supp. 996, 1007 (D.Ariz. 1980); *Trilogy Communications Inc. v. Comm Scope Co.*, 754 F.Supp. 468, 511 (W.D.N.C. 1990).

These cases accord with this Court's teachings that limit damages for infringement based on lost profits to cases in

which the patentee has practiced the patent. When the patentee does not market a product embodying the patent, the patentee may recover as damages a reasonable royalty (but not lost profits). This well settled approach assures that patent damages are awarded only for losses caused by infringement.

2. THIS COURT'S CASES REGARDING THE ENTIRE MARKET VALUE RULE ESTABLISH THAT DAMAGES MAY ONLY BE RECOVERED FOR LOSSES CAUSED BY INFRINGEMENT

Patent infringement claims may involve a machine that combines both patented and unpatented elements. Likewise, the patentee may assert that it has lost sales of ancillary goods typically sold with the patented product. In these situations, this Court's cases prevent the extension of the patent by an award of damages that is not fairly attributable to losses caused by infringement. These cases, discussed below, concern the entire market value rule.

Under the entire market value rule, damages for infringement of a patent that covers only a portion of the device sold must be apportioned between the value derived from the patented portion and the value derived from elements in the public domain or covered by other patents. For the patentee to recover damages based on the lost sale of an entire machine, or of ancillary goods sold therewith, the patentee must prove that the entire market value of the item sold is derived from the patented portion.

This rule was recognized by this Court in *Seymour v. McCormick*, 16 How. at 489. In *Seymour*, the district court instructed the jury that the amount to be awarded in damages was the same "whether the patent covers an entire machine or an improvement on a machine." The Supreme Court reversed, holding that the amount of damages was a question of fact which had to be actually proved, and could not be based on

"what speculatively [the patentee] may have lost." *Id.* at 490. The court continued that:

> If the measure of damages be the same whether a patent be for an entire machine or for some improvement in some part of it, then it follows that each one who has patented an improvement in any portion of a steam-engine or other complex machines, may recover the whole profits arising from the skill, labor, material, and capital employed in making the whole machine, and the unfortunate mechanic may be compelled to pay treble his whole profits to each of a dozen or more several inventors of some small improvement in the engine he has built. *By this doctrine even the smallest part is made equal to the whole, and "actual damages" to the plaintiff may be converted into an unlimited series of penalties on the defendant.*

Id. (emphasis added).

The Supreme Court reiterated this rule in *Garretson v. Clark*, 111 U.S. at 121, and established that the burden was upon the patentee to prove either what portion of the damages were attributable to the patented feature or that the entire market value of the item sold was due to the patented feature:

> The patentee . . . must in every case give evidence tending to separate or apportion the defendant's profits and the patentee's damages between the patented feature and the unpatented features, and such evidence must be reliable and tangible, and not conjectural or speculative; or he must show, by equally reliable and satisfactory evidence, that the profits and damages are to be calculated on the whole machine, for the reason that the entire value of the whole machine, as a marketable article, is properly and legally attributable to the patented feature."

Similarly, in *Keystone Mfg. Co. v. Adams* 151 U.S. at 147 (1894), the Court stated the rule as follows:

> [T]he burden of proof is on plaintiff; that where the infringed device was a portion, only, of defendant's machine, which embraced inventions covered by patents other than that for the infringement of which the suit is brought, in the absence of proof to show how much of that profit was due to such other patents, and how much was a manufacturer's profit, the complainant is entitled to nominal damages only.

The entire market value rule has been applied in a variety of contexts to assure that damages for infringement are not recoverable for injuries not caused by infringement. The *Keystone* Court noted that this rule had been applied by the Supreme Court in "numerous cases—some at law, others in equity." *Id.* It continues to apply today whether the patentee is seeking damages based on a reasonable royalty or lost profits. *See Rite-Hite*, 56 F.3d at 1549.[2] The rule shows that whenever a patent lawsuit involves a machine with both patented and unpatented components, the patentee must show a relationship between the invention and the patentee's losses.

The entire market value rule shows that a patentee may recover all damages that are fairly attributable to the patent, but may not recover damages based on other business losses. The rule is entirely consistent with the statutory language, which permits no more than "damages adequate to compensate for the infringement." 35 U.S.C. § 284. The patentee must establish that its patented (rather than an unpatented feature) accounts for some or all of the demand for the product.

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[2] The rule was unaffected by the Patent Act revisions in 1946. *See, e.g., Paper Converting Machine Co. v. Magna-Graphics Corp.*, 745 F.2d 11, 22-23 (Fed. Cir. 1984) (applying the rule); *Leesona Corp. v. United States*, 599 F.2d 958, 974 (Ct. Cl. 1979), *cert. denied*, 444 U.S. 991 (1979) (same).

II. THE *PEREGO* DECISION HAS RADICALLY CHANGED THE SCOPE OF PATENT PROTECTION BY REJECTING WELL-ESTABLISHED LIMITATIONS ON LOST PROFITS

In the decision below, the Federal Circuit extended the scope of patent rights well beyond the limits established by the Patent Act and this Court's prior decisions. Instead of applying the well-settled requirements that a patentee seeking to recover for lost sales sell the patented product and show that losses are attributable to infringement, the Federal Circuit followed a new approach and allowed the patentee to recover without any showing of injury caused by infringement.

The patentee here (King) sought damages based on lost sales of its tape loaders. King's tape loaders did not incorporate the invention claimed in the '461 patent at issue. Tapematic's tape loaders likewise did not use the patented device. The product that used the patented device was a tape splicing assembly contained within a Tapematic reel changer. The reel changer was an optional accessory to its tape loader. King did not even market a reel changer.

Thus King could not, and did not, satisfy the well-established requirements for receiving as damages an award of lost profits. King did not market a device embodying the claimed invention. King did not show that its losses were attributable to infringement of the patent. Yet this Court's cases establish that lost profits cannot be awarded absent these showings. *See, e.g., Crosby Steam Gage Valve Co. v. Consolidated Safety Valve Co., supra*; *Garretson v. Clark, supra.*

In *Perego*, the award of lost profits as damages was not connected to the claim of infringement. Although the majority purported to require "but for" causation as a necessary condition for recovery of lost profits, its approach actually dispenses with any such minimal requirement. The decision below allowed a recovery of lost profits simply upon a show-

ing that Tapematic was competing in the tape loader market; the Court did not require *any* showing that the losses were caused by infringement.

Instead, the *Perego* majority approved recovery based on the theory that if the Tapematic tape loader had not been available, customers would have purchased "whatever else was on the market." App. 65a. Since King held a 70% share of the market, the court concluded that King would have made close to 70% of the sales of tape loaders made by Tapematic, along with spare parts for the lost sales.

The Federal Circuit required no showing that Tapematic's use of the patented device (a tape splicing assembly, which was embodied within a Tapematic reel changer offered as an optional accessory to the Tapematic tape loader) had any effect on King's tape loader sales. Indeed, its market share approach to quantifying damages suggests the opposite assumption—that the presence or absence of the patented device had no effect on sales.

The *Perego* majority simply ignored this Court's considered precedent as set forth in *Seymour*, 16 How. at 489, *Crosby*, 141 U.S. at 452-453 and other cases regarding limitations on the availability of lost profits as damages. Similarly, the majority ignored the limitations on recovery described in this Court's opinions explaining the entire market value rule. In so doing, the *Perego* majority allowed recovery for business losses that had no connection to the patent that was infringed.

The majority attempted to justify its expansion of patent rights by reference to the history of the Patent Act and public policy, but its superficial analysis ignores the case law previously discussed and distorts other teachings of this Court. For example, the majority attempted to justify its expansion of damages for lost sales based on language from *Aro*, 377 U.S. at 507. App. 11a. In so doing, the majority failed to note that *Aro* limited, rather than expanded, recovery by guarding against double recovery. *Aro*, 377 U.S. at 510. Indeed, *Aro*

expressly cautioned against allowing "the patentee to derive a profit . . . on unpatented *rather than* patented goods . . . ." *Id.* (opinion of Brennan, Stewart, White, and Goldberg, JJ) (emphasis in original).

Similarly, the majority pulled out of context a statement in *General Motors Corp. v. Devex*, 461 U.S. at 654 to the effect that a patentee should receive "full compensation for any damages he suffered as a result of the infringement." App. 12a. The quoted sentence from *General Motors* in its original form states that "prejudgment interest" (rather than any conceivable compensation) should ordinarily be awarded. The Court went on to address the standard for awarding prejudgment interest. In short, the issue in *General Motors* was quite remote from the one presented here. Moreover, the *Perego* court ignored the plain instruction in *General Motors* that damages, to be compensable, must be "a result of the infringement." *Id.*

The majority also attempted to justify its new approach based on the clarification of the Patent Act in 1952 to the effect that the patentee has the power "to exclude others from making, using or selling" the invention. App. 13a (quoting 35 U.S.C. § 154). While correct, this point is irrelevant. The question presented is not *whether* a patentee may recover without marketing goods embodying the patent, but rather *the measure* of recovery. King is entitled to recover a reasonable royalty under 35 U.S.C. § 284—but not to damages measured solely by lost sales of unpatented products.

Finally, the majority based its expansion of the Patent Act on its limited and one-sided understanding of public policy. Essentially, the majority understood public policy as requiring that above all a patentee's rewards must be maximized so as to encourage innovation. App. 15a. This Court, however, has long recognized that patent monopolies have costs as well as benefits, and the rules for construing and enforcing patents reflect this more balanced understanding.

For example, this Court has repeatedly explained that the public policy of promoting free competition in accordance with the antitrust laws may be undermined if patents are extended beyond their proper scope. *See, e.g., Ethyl Gasoline Corp. v. United States*, 309 U.S. at 459; *Mercoid Corp. v. Mid-Continent Inv. Co.*, 320 U.S. at 666.

More recently, the Court has recognized the potential costs of a too liberal policy towards patents in addressing the right to challenge patent validity. In *Blonder-Tongue Lab. Inc. v. Univ. of Illinois Found.*, 402 U.S. at 343 (1971), the Court stated:

> Although recognizing the patent system's desirable stimulus to invention, we have also viewed the patent as a monopoly which, although sanctioned by law, has the economic consequences attending other monopolies. A patent yielding returns for a device that fails to meet the congressionally imposed criteria of patentability is anomalous.

Likewise, in *Lear, Inc. v. Adkins*, 395 U.S. 653 (1969), the Court recognized the same policies in the context of rejecting the doctrine of licensee estoppel—a doctrine that barred a patent licensee from challenging the validity of the patent. *Lear*, 395 U.S. at 656. The Court held that licensee estoppel was contrary to public policy:

> Surely the equities of the licensor do not weigh very heavily when they are balanced against *the important public interest in permitting full and free competition in the use of ideas which are in reality a part of the public domain.*

Id. at 670 (emphasis added). *See also, Cardinal Chemical Co.*, 113 S.Ct. at 1978 (invalidating Federal Circuit's practice of vacating patent invalidity determinations when the patent was also found to be not infringed, since that practice "prolong[ed] the life of invalid patents, [and] encourage[ed] endless litiga-

tion (or at least uncertainty) over the validity of outstanding patents . . . .").

As can be seen from the facts surrounding this case, patents are almost inherently fraught with uncertainty as to their scope and validity. King asserted infringement of 3 patents, including several claims of the '461 patent. Tapematic prevailed entirely against the infringement assertions based on the two King patents covering tape loading machines, and prevailed on all but one claim of the '461 patent. Moreover, Tapematic clearly had a good faith basis for believing it did not infringe that claim—the district court specifically found that Tapematic's infringement was not willful.

Issues of patent validity and scope often cannot be resolved without a full adversarial trial. A charge of patent infringement now carries with it the specter of ruinous and unforeseeable damages. The rule expressed in *Perego* will have a far reaching economic impact by deterring legitimate competition.

Thus the Federal Circuit's view of public policy expressed in *Perego*, which is focussed solely on maximizing the returns on patents, is at best partial and myopic. This Court's cases show that patent policy must recognize appropriate limitations on patents. The *Perego* majority's flawed understanding of public policy does not at all justify its determination that the remedy provided by Congress for a patentee not practicing its patent—a reasonable royalty in 35 U.S.C. § 284—is inadequate compensation.

A. THE *PEREGO* COURT EXPANDED THE DECISION IN *RITE-HITE*

In addition to the above analysis, the *Perego* majority relied in large part on *Rite-Hite*, decided in June 1995 by the Federal Circuit sitting *en banc* with four judges dissenting in relevant part. This Court declined a petition for certiorari in *Rite-Hite* on October 2, 1995.

The *Perego* majority, however, went well beyond the approach set forth in *Rite-Hite*. Although this expansion of *Rite-Hite* was brought to the attention of the Federal Circuit through an application for rehearing or *en banc* review, the Federal Circuit (with two judges voting for rehearing) denied review. By expanding upon its prior decision in *Rite-Hite*, the Federal Circuit has firmly indicated its rejection of this Court's precedents regarding limitations on the scope of patent rights. Viewed in this context, the importance of the issue presented and the need for review by this Court is clear.

To understand the differences between *Perego* and *Rite-Hite*, a short synopsis of *Rite-Hite* may be helpful. Rite-Hite, the patentee, sought damages from Kelley's infringement based on the lost sales of vehicle restraints (devices for securing trucks to loading docks) and for dock levelers (devices for bridging the edges of trucks and docks). *Rite-Hite*, 56 F.3d at 1542, 1543. Rite-Hite manufactured two types of vehicle restraints, one of which incorporated the patent infringed by Kelley and the other of which (the "ADL-100") did not. *Id.* at 1543, 1548. Rite-Hite's dock levelers, which were sold with and functioned with the vehicle restraints, were not covered by a patent. *Id.* at 1549. The Federal Circuit allowed Rite-Hite to recover damages based on lost sales of both types of vehicle restraints, but found recovery for the dock restraints barred by the entire market value rule.

As to lost sales of the Rite-Hite ADL-100, the Federal Circuit emphasized a key point that distinguishes *Rite-Hite* from *Perego*: Kelley's infringing vehicle restraint in *Rite-Hite* was directly competitive with the ADL-100. *Id.* 56 F.3d at 1551. In *Perego*, as noted above, King did not even market a reel-changer, much less a reel changer with a patented tape splicing assembly. Thus, unlike in *Perego*, the patentee in *Rite-Hite* had at least established "but for" causation. *See id.* at 1548 ("if the patent infringement had nothing to do with the lost sales, 'but for' causation would not have been proven").

In addition, *Rite-Hite*, unlike *Perego*, applied the entire market value rule so as to assure that the patent in question was not extended beyond its proper scope. Applying the rule, the court set aside a damages award based on Rite-Hite's lost sales of dock levelers. *Id.* at 1549-51. The court explained that the levelers, although used with the vehicle restraints, were separate devices, and there was "no basis for extending . . . recovery to include damages for items that are neither competitive with nor function with the patented invention." *Id.* at 1551.

This same analysis would have precluded an award based on lost profits in *Perego*, since Tapematic's reel changer was an optional accessory to, rather than a part of, its tape loader. Despite the entire market value rule, *Perego* failed to analyze whether the infringing device had any significance in creating demand for the product. Here again, the *Perego* court dispensed with the requirement of "but for" causation, since it did not even inquire as to whether the infringement caused lost sales.

Thus *Perego* dramatically extends the rule of *Rite-Hite*. Although *Perego* purports to require proof of causation, it actually dispenses with the proof requirements enforced in *Rite-Hite*. Thus *Perego* confirms the Federal Circuit's continuing commitment to the questionable course it set in *Rite-Hite*—a course that takes patent monopolies beyond their rightful boundaries.

CONCLUSION

In the decision below, the Federal Circuit ignored the requirements of the Patent Act, of this Court's prior decisions, and of the public policies embodied in the antitrust statutes. It allowed a damages recovery for losses not caused by patent infringement, thereby extending the reach of a patent to cover goods in the public domain. Because the decision is contrary

to the decisions of this Court and involves an issue of major significance, the petition for certiorari should be granted.

Respectfully submitted,

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APPENDIX

UNITED STATES COURT OF APPEALS
FOR THE FEDERAL CIRCUIT

OPINION ANNOUNCING
JUDGMENT OF THE COURT

OPINION FILED AND JUDGMENT
ENTERED: September 19, 1995

The attached opinion announcing the judgment of the court in your case was filed today. The judgment was entered pursuant to Rule 36. The mandate will be issued in due course.

Information is also provided about petitions for rehearing and suggestions for rehearing in banc. The questions and answers are those frequently asked and answered by the Clerk's Office.

Each side shall bear its own costs.

Exhibits and visual aids shall be promptly retrieved by the party that lodged them with this court.

FRANCIS X. GINDHART
Clerk

UNITED STATES COURT OF APPEALS
FOR THE FEDERAL CIRCUIT

DECIDED: September 19, 1995
Docket No. 91-1125, -1132

KING INSTRUMENT CORPORATION,

Plaintiff-Appellant,

—v.—

LUCIANO PEREGO and TAPEMATIC,

Defendants/Cross-Appellants.

Before:

NIES, NEWMAN, and RADER,
Circuit Judges.

Opinion of the court filed by *Circuit Judge* RADER. Dissenting-in-part opinion filed *Circuit Judge* NIES.

RADER, *Circuit Judge.*

King Instrument Corporation (King) sued Luciano Perego and Tapematic SrL (Tapematic) for infringement of U.S. Patents Nos. 3,637,153 (the '153 patent), 3,825,461 (the '461 patent), and 3,997,123 (the '123 patent). The United States District Court for the District of Massachusetts awarded King damages for Tapematic's infringement of the '461 patent.

King Instrument Corp. v. Perego, 737 F. Supp. 1227, 1242, 16 USPQ2d 1994, 2007 (D. Mass. 1990) (*King*). The district court found that Tapematic did not infringe the '153 patent or the '123 patent. *Id.* at 1242-43. Finding no clear error in the district court's infringement analysis, and no abuse of discretion in the district court's assessment of the amount of damages, this court affirms.[1]

BACKGROUND

King's three patents relate to loading magnetic audio or video tape into closed cassettes. A fully loaded cassette contains two types of tape: tile magnetic audio or video tape and a non-magnetic leader tape. The magnetic tape—also called "use" tape—functions to permit customers to record or play back recordings. The non-magnetic leader tape—a short length of plastic, often clear, tape—leads both ends of the magnetic tape. One end of the leader tape attaches to the winding hub of the cassette; the other end attaches to the magnetic tape.

The manufacturer produces closed tape cassettes without any magnetic tape. Each closed cassette contains only a leader tape connected to its two winding hubs. The manufacturer adds magnetic tape later by splicing magnetic tape into the middle of the leader tape and winding it into the cassette. King and Tapematic market competing machines that automatically splice and wind magnetic tape into otherwise completed video cassettes.

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[1] In an earlier action brought by King against Otari Corporation, this court discussed similar King technology related to the loading of closed cassettes with magnetic tape. *See King Instrument Corp. v. Otari Corp.*, 767 F.2d 853, 226 USPQ 402 (Fed. Cir. 1985) (*Otari*), *cert. denied*, 475 U.S. 1016 (1986). In particular, this court upheld the validity of the '153 patent and found it infringed by Otari Corporation. *See Otari*, 767 F.2d at 857–59, 862-63. This court assumes the reader is familiar with the entirety of this earlier opinion as well as the district court opinion in this case. *King Instrument Corp. v. Perego*, 737 F. Supp. 1227, 16 USPQ2d 1994 (D. Mass. 1990) (*King*).

The '153 Patent

The '153 patent discloses a partially automated machine for loading magnetic tape into a cassette. The '153 patent claims a mechanical splicing block whose arms swing to bring the magnetic tape into contact with the leader tape.

The invention of the '153 patent manually extracts the leader tape from the cassette and places it over a splicing head. A vacuum holds the leader tape in place while a knife cuts it into two sections. At this point, the moveable track swings out of alignment with the stationary track. A second moveable track holding the magnetic tape then swings into alignment with the leader tape. The invention applies a splice between the leader tape and the magnetic tape which are held in place by a vacuum. The vacuum then releases the tape and the machine turns the hub to load magnetic tape into the cassette. When the cassette is full, the vacuum again grabs and a knife cuts the magnetic tape. The swinging brings the end of the magnetic tape back in contact with the other end of the leader tape and applies a splice. The hubs tighten the tape in the cassette to complete the loading.

The '123 Patent

The '123 patent claims a winding machine which more fully automates the invention disclosed in the '153 patent. Instead of loading cassettes one at a time, the invention of the '123 patent enables an operator to load a stack of cassettes (e.g., 20 to 30) into a cassette magazine. The magazine advances each cassette in sequential order for loading by the '153 patent device. The '123 patent also claims a mechanism for automatically extracting the leader tape from the cassette and positioning it on the splicing blocks. The '123 patent's invention thus automates the '153 patent's manual extraction and positioning functions.

The '461 Patent

The '461 patent claims a splicing assembly for connecting the magnetic and leader tapes. The splicing assembly includes three splicing blocks. Two of the three blocks shift to align the magnetic tape with the leader tape; the third is a stationary splicing block.

The District Court

The district court found that Tapematic infringed the '461 patent and awarded King damages. *King*, 737 F. Supp. at 1242. The district court did not find willful infringement. *Id.* at 1241. The district court also upheld the validity of the '153 patent, *id.* at 1230, but found that Tapematic did not infringe, literally or under the doctrine of equivalents, either the '153 or the '123 patent. *Id.* at 1234, 1239, 1241.

King appeals the district court's findings of noninfringement of the '153 and '123 patents and seeks enhanced damages for willful infringement of the '153 patent. Tapematic cross-appeals the trial court's infringement finding on the '461 patent and challenges the damages award. Tapematic does not appeal the trial court's validity findings on the '153 patent.

Appellate History

This panel heard oral argument on the cross-appeals on August 5, 1991. More than two years later, on January 13, 1994, the court decided *sua sponte* to consider this appeal *en banc*. The court then deferred action on this appeal pending *en banc* resolution of *Rite-Hite Corp. v. Kelley Co.*, an appeal brought in 1992 involving damages issues overlapping with those raised by Tapematic. On June 15, 1995, the court issued its opinion in *Rite-Hite* resolving the damages issues. *Rite-Hite Corp. v. Kelley Co.*, 56 F.3d 1538, 35 USPQ2d 1065 (Fed. Cir. 1995) (en banc). On July 10, 1995, the court

returned the present appeal to this panel for disposition in accordance with *Rite-Hite*.

DISCUSSION

This court reviews the district court's findings of fact under Fed. R. Civ. P. 52(a):

> Findings of fact, whether based on oral or documentary evidence, shall not be set aside unless clearly erroneous, and due regard shall be given to the opportunity of the trial court to judge of the credibility of the witnesses.

See Heisig v. United States, 719 F.2d 1153, 1158 (Fed. Cir. 1983). Legal conclusions of the district court stand unless incorrect as a matter of law. *Id.*

This court does not review *de novo* proceedings of the district court. *Medtronic, Inc. v. Daig Corp.*, 789 F.2d 903, 904, 229 USPQ 664, 666 (Fed. Cir.), *cert. denied*, 479 U.S. 931 (1986). The party seeking reversal of a district court decision bears the burden of showing reversible legal error or clear factual errors in light of the trial record. *Carl Schenck, A.G. v. Nortron Corp.*, 713 F.2d 782, 785, 218 USPQ 698, 700 (Fed. Cir. 1983). Where the record viewed in its entirety renders the district court's account of the evidence plausible, or discloses two permissible readings of the evidence, the fact-finder has committed no clear error. *Hybritech Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 1375, 231 USPQ 81, 87 (Fed. Cir. 1986), *cert. denied*, 480 U.S. 947 (1987).

I. Background

The district court assessed infringement using the standard tests. *See King*, 737 F. Supp. at 1231 (citing *Standard Oil Co. v. American Cyanamid Co.*, 774 F.2d 448, 452, 227 USPQ 293, 295-96 (Fed. Cir. 1985); *Martin v. Barber*, 755 F.2d 1564, 1567, 225 USPQ 233, 234 (Fed. Cir. 1985)). All three King patents contain "means-plus-function" language. *King*, 737 F. Supp. at 1231. This court construes means-plus-

function claim language "to cover the corresponding structure, material, or acts described in the specification and equivalents thereof." 35 U.S.C. § 112 (1988); *Valmont Indus., Inc. v. Reinke Mfg. Co.*, 983 F.2d 1039, 1042, 25 USPQ2d 1451, 1454 (Fed. Cir. 1993); *Johnston v. IVAC Corp.*, 885 F.2d 1574, 1580, 12 USPQ2d 1382, 1386 (Fed. Cir. 1989). Thus, for a means-plus-function limitation to read on an accused device, the accused device must employ means identical or equivalent to the structures, material, or acts described in the patent specification. The accused device must also perform the identical function as specified in the claims. *Valmont*, 983 F.2d at 1042.

A. *The '153 Patent*

The district court held that Tapematic did not infringe the '153 patent. *King*, 737 F. Supp. at 1242-43. The district court found that the accused device aligns and splices tape differently than the claimed structure. *Id.* at 1233. Tapematic's accused machines used a horizontal shift block assembly to align and splice. The trial court found that this shift block device did not literally infringe the '153 patent's swing arm claims. *Id.* at 1234. Moreover the accused device operates in such a different "way" that the district court found no infringement under the doctrine of equivalents. *Id.* at 1239.

Specifically, the district court noted several differences between the '153 claims and the accused device. For instance, the '153 patent claims a swing arm assembly which pivots in a single plane, the accused Tapematic device's shift block assembly slides in two planes. The '153 patent discloses three separate splicing blocks, one fixed and two pivoting; the accused device uses only two splicing blocks, one fixed and the other sliding. Finally, the trial court cited testimony by E. Blanco (Tapematic's expert), W. Isom (King's expert), and J. King (inventor of the '153 patent), who all agreed that the accused product worked differently than the claimed device. *Id.* at 1234. In performing its infringement analysis, the trial court correctly construed claim 16 in connection with the specification to include the pivoting swing arm assembly. The

trial court correctly interpreted claims 2, 10, and 16 to encompass the structure disclosed in the specification for holding, aligning, and splicing tapes—and equivalents thereof.

After comparing the claimed device with the accused product, the court correctly determined that the '153 patent was not infringed—either literally or under the doctrine of equivalents. *Id.* at 1234, 1239. Moreover, the district court's finding of noninfringement of the '153 patent is consistent with this court's earlier decision in *King Instrument Corp. v. Otari Corp.*, 767 F.2d 853, 226 USPQ 402 (Fed. Cir. 1985) (*Otari*), *cert. denied*, 475 U.S. 1016 (1986), which based a finding of infringement upon a disclosure of the Otari mechanism in the patent specification. *See King*, 737 F. Supp. at 1233 n.6. Because it affirms the district court's finding of noninfringement on the '153 patent, this court need not address willfulness and enhanced damages on that patent.

B. *The '123 Patent*

The district court also held that Tapematic did not infringe the '123 patent. *King*, 737 F. Supp. at 1242-43. The district court compared the claims of the '123 patent with each of the Tapematic accused devices (Tapematic 900, 2,002, and 3,000 Series). *See id.* at 1237. The district court found that the leader extracting and positioning mechanisms in the Tapematic machines operate very differently from that recited in the '123 patent claims. *Id.* Specifically, claims 1 and 12 of '123 patent claims a single mechanism to extract and position the leader tape in a single movement. The Tapematic machines, on the other hand, have at least two different components performing these tasks in a substantially different way. The '123 patent described extraction of the leader tape with a vacuum device. Tapematic's devices use a mechanical extractor. Therefore, the district court correctly concluded that the Tapematic machines did not literally, nor under the doctrine of equivalents, infringe the '123 patent. *Id.* at 1237-39.

C. *The '461 Patent*

Although finding no literal infringement of claim 1 of the '461 patent, *King*, 737 F. Supp. at 1235, the district court found that the splicer in the Tapematic 2,002's reel changer literally infringed claim 12. *Id.* at 1235-36. The Tapematic 2002 is a "dual pancake" loader, i.e., it includes a reel changer assembly that automatically switches to a second reel of magnetic tape when the first reel runs out. Tapematic's reel changer spliced magnetic tape to magnetic tape. Because claim 1 includes only a structure for splicing magnetic tape to leader tape, the district court determined that Tapematic's assembly did not literally infringe claim 1. Claim 12, however, contained no such limitation. Moreover, claim 12 does not require alignment of "abutting" ends of the leader and magnetic tapes.

The district court properly found infringement of claim 12 because all limitations of claim 12 read on the splicing assembly of the Tapematic 2,002's reel changer. *Id.* at 1236. Therefore, this court affirms the district court's finding that Tapematic infringed the '461 patent.

II. Lost Profits

The district court found that Tapematic infringed the '461 patent. The district court found that this infringement caused King to sustain economic injury in the form of lost profits. In other words, "but for" the infringement, King would have sold more of its competing product. *See Otari*, 767 F.2d at 863; *Paper Converting Mach. Co. v. Magna Graphics Corp.*, 745 F.2d 11, 21, 223 USPQ 591, 598 (Fed. Cir. 1984). The district court also took into account that King's competing product did not embody the invention of the '461 patent asserted against Tapematic. The district court, however, found reason to redress King's injury notwithstanding King's election to refrain from making or selling the patented invention. Tapematic challenges the award of lost profits in such an instance, alleging instead that lost profits can be awarded only to one who makes or sells the patented device.

This court must reject Tapematic's challenge. This court held in *Rite-Hite,* sitting *en banc*, that a patent owner who has suffered lost profits is entitled to lost profits damages regardless of whether the patent owner has made, used, or sold the patented device. *See Rite-Hite*, 56 F.3d at 1546, 35 USPQ2d at 1072.[2] Furthermore, the language and history of the patent act and sound policy require this result, as demonstrated in the following analysis.

A. *The Patent Act—Language and History*

Title 35 of the United States Code provides that a patent grant confers "the *right* to exclude others from making, using, or selling the invention." 35 U.S.C. § 154(a)(1) (West Supp. 1995) (emphasis added). An act of infringement—i.e., making, using, or selling the patented invention "without authority," 35 U.S.C. § 271(a) (1988)—trespasses on this right to exclude. Title 35 redresses such a violation of rights by "award[ing] the claimant damages adequate to compensate for the infringement." 35 U.S.C. § 284 (1988).

Section 284 imposes no limitation on the types of harm resulting from infringement that the statute will redress. The section's broad language awards damages for any injury as long as it resulted from the infringement. Though this section sets a lower limit of a reasonable royalty on the amount of recovery, it mandates an amount "adequate to compensate for the infringement." *Id.* The Patent Act also includes enhanced damages for willful infringement or bad faith and for attorney fees. 35 U.S.C. §§ 284, 285 (1988); *see Beatrice Foods Co. v. New England Printing & Lithographing Co.*, 923 F.2d 1576, 1578, 17 USPQ2d 1553, 1555 (Fed. Cir. 1991).

Section 284 specifies that compensation takes the form of "damages." Congress and the Supreme Court have had several opportunities to define and construe this term under the Patent

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[2] We remark on the dissent's characterization of the court's *en banc* ruling in *Rite-Hite. Rite-Hite* and this decision do not depart from the requirement that damages shall be adequate to compensate for the infringement, 35 U.S.C. § 284 (1988); Congress set the reasonable royalty as the floor, not the ceiling of damages for infringement.

Act and section 284. Congress has not amended the Patent Act, nor has the Supreme Court interpreted the term "damages" to require exploitation of the invention as a prerequisite to recovery of lost profits. Moreover. such a prerequisite runs contrary to the language and enactment history of section 284.

The long history of the Patent Act shows that its language does not require a patentee to make the patented invention to qualify for damages. Before 1946, a patentee who proved infringement could recover "in addition to the profits to be accounted for by the defendant, the damages the complainant has sustained thereby." R.S. § 4921. Thus a patentee could recover "both [its] own damages and the infringer's profits." *General Motors Corp. v. Devex Corp.*, 461 U.S. 648, 654, 217 USPQ 1185, 1188 (1983). The law changed in 1946 to provide a recovery of "general damages which shall be due compensation for making, using, or selling the invention." Act of August 1, 1946, ch. 726, 60 Stat. 778, 35 U.S.C. § 70 (1946).

The 1946 amendment eliminated the patent's right to recover the infringer's "profits as such and allow recovery of damages only." *Aro Mfg. Co. v. Convertible Top Replacement Co.*, 377 U.S. 476, 505-07, 141 USPQ 681, 693-94 (1964); *General Motors*, 461 U.S. at 654. These profits were considered too difficult and cumbersome to prove in court. *See* H.R. Rep. No. 1587, 79th Cong., 2d Sess. 1-2 (1946); S. Rep. No. 1503, 79th Cong., 2d Sess. 2 (1946). The 1946 amendment thus sought to eliminate the delay and cost of protracted litigation to determine the infringer's profits. *Id.*

The 1946 amendment, however, retained the guarantee of complete compensation for the damages from infringement. The statutory language of the 1946 amendment anticipated the requirement for "adequate" compensation in the present statute. *See* 35 U.S.C. § 284; *see also* H.R. Rep. No. 1587, 79th Cong., 2d Sess. 1 (1946). To expedite the legal process, Congress amended the statute to provide for "*any damages* the complainant *can prove*." *Id.*[3] Later, the Patent Act of 1952

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[3] The types of harm for which infringement damages are recoverable are not, however, completely unlimited. Although broad, the term

consolidated the existing provisions relating to damages into section 284. The 1952 Act effected no substantive change other than the addition of an attorney fees clause. *General Motors,* 461 U.S. at 655 n.9.

The Supreme Court has reinforced the breadth of section 284 in two cases interpreting the statutory provision. In *General Motors,* the more recent case, the Court held that section 284 provided for the award of prejudgment interest "where necessary to afford the plaintiff full compensation for the infringement." 461 U.S. at 654. Discussing the 1946 amendment, the Supreme Court stated: "Congress sought to ensure that the patent owner would in fact receive full compensation for '*any damages*' he suffered as a result of the infringement." *Id.* at 654-55 (quoting H.R. Rep. No. 1587, 79th Cong., 2d Sess. 1-2 (1946)) (emphasis added).

And in *Aro*, the Court's first interpretation of section 284, the Court read the term "damages" broadly to cover any pecuniary injuries:

> [T]he present statutory rule is that only "damages" may be recovered. These have been defined by this Court as "compensation for the pecuniary loss he [the patentee] has suffered from the infringement, without regard to the question whether the defendant has gained or lost by his unlawful acts." *Coupe v. Rover,* 155 U.S. 565, 582. They have been said to constitute "*the difference between his*

"damages" in the Patent Act has limits. Compensatory (or actual) "damages" are generally those which are the natural result of the harmful act in question. *Black's Law Dictionary* 390 (6th ed. 1990). For instance, if the patentee's mother died of a heart attack due to the shock of discovering an infringing product at the supermarket, the Act would not authorize damages for wrongful death or emotional distress. The unfortunate death would not be economic harm, nor the direct and foreseeable result of infringement. Economic harm, such as the profits lost on sales of competing products in this case, however, is a direct and foreseeable result of infringement. Indeed, the infringer actively seeks to attract customers away from competitors. Thus the infringer cannot feign surprise that the lost profits of a competitor are the direct and foreseeable result of infringement. Lost economic profits on products in direct competition with infringing products are clearly foreseeable and constitute "damages."

> *pecuniary condition after the infringement, and what his condition would have been if the infringement had not occurred.*" *Yale Lock Mfg. Co. v. Sargent*, 117 U.S. 536, 552. The question to be asked in determining damages is "how much had the Patent Holder and Licensee suffered by the infringement. And that question [is] primarily: had the Infringer not infringed, what would the Patent Holder-Licensee have made?" *Livesay Window Co. v. Livesay Industries. Inc., supra*, 251 F.2d [469] at 471.

Aro, 377 U.S. at 507 (emphasis added; second and third alterations in original); *see Panduit Corp. v. Stahlin Bros. Fibre Works. Inc.*, 575 F.2d 1152, 1156, 197 USPQ 726, 729 (6th Cir. 1978) (quoting *Aro*).

By using the phrase "damages adequate to compensate," the Act provides economic redress sufficient to restore the patentee to its rightful position absent the infringement. 35 U.S.C. § 284. The Supreme Court has underscored this meaning of section 284. Similarly, construing section 284, this court held: "If the record permits the determination of actual damages, namely, the profits the patentee lost from the infringement, that determination accurately measures the patentee's loss." *Hanson v. Alpine Valley Ski Area, Inc.*, 718 F.2d 1075, 1078, 219 USPQ 679, 681 (Fed. Cir. 1983); *see also Weinar v. Rollform Inc.*, 744 F.2d 797, 807, 223 USPQ 369, 375 (Fed. Cir. 1984) *cert. denied*, 470 U.S. 1084 (1985).

Section 284 provides adequate compensation for the infringement of rights. The nature of the protected rights explains as well the breadth of section 284's protection. Before the 1952 Act, the Patent Act defined the bundle of patent rights in terms of "the exclusive right to make, use, and vend the invention or discovery." 35 U.S.C. § 40 (1946). This wording—defining the grant in terms of the right to make the invention, rather than the right to exclude others from making the invention—caused confusion.

The 1952 Act, § 154, clarified that a patent empowered its owner "to *exclude others* from making, using, or selling" the invention. 35 U.S.C. § 154 (1952) (emphasis added). The 1952 amendment should have corrected any mistaken belief

that patent rights somehow hinged upon the patentee's exploitation of the invention. Inventors possess the natural right to exploit their inventions (subject to the patent rights of others in a dominant patent) apart from any Government grant. Therefore, patent rights do not depend upon the exercise of rights already in the patentee's possession. Thus, the 1952 Act clarified that a patent confers the right to exclude others from exploiting an invention. It does not confer the right to exploit the invention already possessed by the inventor.

This understanding of the right protected by section 284 informs the purpose and scope of the damages provision. Section 284 protects the right to exclude others from exploiting an invention. To invoke that protection. a patentee need not have exercised its natural right to itself make, use, or sell the invention. The damages section, section 284, protects the right to exclude, not the right to exploit. A patentee qualifies for damages adequate to compensate for infringement without exploiting its patent.

Thus the language, the context, the enactment history, and the Supreme Court's interpretation of the Patent Act clarify that "damages" in section 284 encompasses an amount necessary to redress any direct injury from infringement. Moreover, the award of damages compensates for the violation of the patentee's right to exclude others from making, using, or selling the invention. The patentee need not make, use, or sell the invention to sustain an injury to that right.

B. *The Patent Act—Policy*

A patentee may suffer injury resulting from the violation of its right to exclude infringing, competing products. The most obvious form of injury from such a violation, as mentioned above, is profits lost to the infringer in the market for the product. The patentee's sale of a competing product not covered by the patent within that market does not change the policy justifications for restoring the parties to the positions they would have occupied absent the infringement.

A patentee is awarded a patent for disclosure of a patentable invention "[t]o promote the Progress of . . . useful Arts." U.S. Const. art I, § 8, cl. 8. A patentee need not make, use, or sell an invention to gain patent protection. Upon proper disclosure of a protectable invention, a patentee acquires the right to exclude others from making, using, or selling the invention.

"The encouragement of investment-based risk is the fundamental purpose of the patent grant, and is based directly on the right to exclude." *Patlex Corp. v. Mossinghoff*, 758 F.2d 594, 599, 225 USPQ 243, 247 (Fed. Cir.), *modified*, 771 F.2d 480, 226 USPQ 985 (Fed. Cir. 1985). "The federal patent system thus embodies a carefully crafted bargain for encouraging the creation and disclosure of new, useful, and nonobvious advances in technology and design in return for the exclusive right to practice the invention for a period of years." *Bonito Boats, Inc. v. Thunder Craft Boats, Inc.*, 489 U.S. 141, 150-51 (1989).

Thus, the Patent Act creates an incentive for innovation. The economic rewards during the period of exclusivity are the carrot. The patent owner expends resources in expectation of receiving the award. Upon grant of the patent, the only limitation on the size of the carrot should be the dictates of the marketplace. Section 284 attempts to ensure this result by deterring infringers and recouping market value lost when deterrence fails.

Providing lost profits compensation in this case preserves those constitutional incentives. Moreover, construing section 284 in harmony with the breadth of its language allows the *market*, rather than courts, to dictate the incentives. This court should not presume to determine how a patentee should maximize its reward for investing in innovation. Yet denying the patentee its provable lost profits in this or any case where the patentee chooses to market a competing nonpatented product would have this result.

The market may well dictate that the best use of a patent is to exclude infringing products, rather than market the invention. A patentee, perhaps burdened with costs of development,

may not produce the patented invention as efficiently as an infringer. Indeed, the infringer's presence in the market may preclude a patentee from beginning or continuing manufacture of the patented product. Thus, as apparent in this case, the patentee may acquire better returns on its innovation investment by attempting to exclude infringers from competing with the patent holder's nonpatented substitute.

Under this situation, the Patent Act is working well. The patentee is deriving proper economic return on its investment in acquiring a patent right. The public benefits from the disclosure of the invention and the ability to exploit it when the patent term expires. As the Supreme Court noted:

> Congress, in the choice of means of promoting the useful arts by patent grants, could have provided that the grant should be conditioned upon the use of the patented invention, as in fact it did provide by the Act of 1832. . . . But Congress was aware that an unpatented invention could be suppressed and the public thus deprived of all knowledge or benefit of it.

Special Equip. Co. v. Coe, 324 U.S. 370, 378 (1945). Moreover, the government can simply "take" the invention where warranted by public interest concerns and provide "adequate compensation" to the patent holder. 28 U.S.C. § 1498 (1988).

As long as the patentee receives a proper economic return on its investment in the acquisition of a patent, the Act does not require that return to come from the sale of patented products.[4] The Act supplies a carrot in the form of economic rewards resulting from the right to exclude. The Act further guarantees adequate damages in the form of provable lost profits to underscore the value of the invention and the incentive to innovate. The Act does not dictate that a patentee

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[4] The "entire market value rule" recognizes that the economic value of a patent may be greater than the value of the sales of the patented part alone. Under this rule, courts have allowed recovery of lost profits or a reasonable royalty based not only on the profit from the patented part, but also on non-patented parts. *See, e.g., State Indus., Inc. v. Mor-Flo Indus., Inc.*, 883 F.2d 1573, 1580, 12 USPQ2d 1026, 1031 (Fed. Cir. 1989), *cert. denied*, 493 U.S. 1022 (1990).

must manufacture its own invention to recover the costs of innovation.[5]

Requiring exploitation of the claimed invention for a recovery of lost profits would cause a systematic failure to award "damages adequate to compensate for the infringement," in cases where the patent holder could otherwise prove causation. Requiring exploitation would force patent owners to accept a reasonable royalty in cases where a reasonable royalty is inadequate compensation. Infringers would in effect receive the windfall of a retroactive compulsory license from the patent owner.

A hypothetical example shows how an infringer could profit from such a rule. A hypothetical patentee could market a product covered by a patent and efficiently supply all demand for the product. A competitor seeking a license under the patent would not succeed. The patentee profits more by supplying the demand itself than by granting a license on terms which would allow the competitor to reasonably operate. In this situation, no reasonable royalty exists. Willing negotiators, assuming they both act in their own best interests, would not agree to any royalty. The value of exercising the right to exclude is greater than the value of any economically feasible royalty. If the competitor infringes in this situation and the patentee can recover only a "reasonable royalty," the patentee does not receive "adequate compensation" as the statute requires. The same reasoning applies any-

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[5] Tapematic cites two cases where this court held lost profits unavailable to patentees who failed to exploit the patented invention. *See Trell v. Marlee Elecs. Corp.*, 912 F.2d 1443, 1445, 16 USPQ2d 1059, 1061 (Fed. Cir 1990); *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.. Harris Press & Shear Div.*, 895 F.2d 1403, 1406 n.2, 13 USPQ2d 1871, 1874 n.2 (Fed. Cir. 1990). In *Trell* and *Lindemann*, however, the record does not show that the patentee sold *any* product in the United States. The patentee had no possible basis for a lost profits claim. These cases, like others, merely reflect the general rule that lost profits are recoverable only if demonstrated by adequate evidence in the record. *Fromson v. Western Litho Plate & Supply Co.*, 853 F.2d 1568, 1574, 7 USPQ2d 1606, 1612 (Fed. Cir. 1988); *Hanson v. Alpine Valley Ski Area, Inc.*, 718 F.2d 1075, 1078, 219 USPQ 679, 681-82 (Fed. Cir. 1983).

time the patent owner benefits more by excluding others than by licensing.

In such situations, if lost profits are not available simply because the patent holder does not market a product pursuant to its patent, infringement may actually be profitable. If licensing (rather than excluding) competitors would have proven more rewarding to the patentee, the patentee would have licensed. Instead, the market dictated that exclusion was the best way to recover innovation investments. Limiting the patentee's recovery to a reasonable royalty, however, would give the infringer what the market denied—a license. Fortunately the Patent Act does not create such incentives to infringe. Rather, it guarantees damages adequate to compensate for infringement—which include provable lost profits.[6]

Requiring a patentee to exploit the infringed claims as a prerequisite for lost profits damages would also create two

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[6] The problem of inadequate compensation when damages are based on a reasonable royalty has been expressly recognized in several cases. *See, e.g., Fromson,* 853 F.2d at 1574-76; *Stickle v. Heublein. Inc.,* 716 F.2d 1550, 1563, 219 USPQ 377, 387 (Fed. Cir. 1983). The solutions suggested include awards of treble damages, attorney fees and prejudgment interest, *Fromson,* 853 F.2d at 1576, and discretionary awards of greater than a reasonable royalty:

> [T]he trial court may award an amount of damages greater than a reasonable royalty so that the award is "adequate to compensate for the infringement." . . . "[T]he infringer would have nothing to lose, and everything to gain if he could count on paying only the normal, routine royalty non-infringers might have paid. As said by this court in another context, the infringer would be in a 'heads-I-win, tails-you-lose' position." Such an increase, which may be stated by the trial court either as a reasonable royalty *for an infringer* . . . or as an increase in the reasonable royalty determined by the court, is left to its sound discretion.

Stickle, 716 F.2d at 1563 (citation omitted; emphasis in original). Such discretionary increases may be appropriate where plaintiffs cannot prove direct and foreseeable damages in the form of lost profits. But where plaintiffs establish lost profits with reasonable probability, a lost profits award reflecting actual damages is preferable to an essentially arbitrary increase in a reasonable royalty.

significant practical problems. First, the remedy for infringement would depend partly on the type and number of claims selected by the inventor, rather than on their scope. Second, infringement trials would become more cumbersome and complex because a patentee would have to prove that the claims cover both its competitor's product and its own.

A hypothetical again illustrates this problem. An inventor originates a useful, nonobvious device composed of the elements A, B, C, and Q_1. A device consisting of ABC is well known. The addition of Q_1 is a significant advance. The inventor or someone on the research team knows, however, that element Q_2 or element Q_3 could function in the device in place of Q_1. Because of the different characteristics of the elements Q_1, Q_2, and Q_3, and the different language necessary to describe these elements, the three embodiments are not readily comprehended in a single claim. Thus, in order to cover the subject matter of the three independent claims, $ABCQ_1$, $ABCQ_2$, and $ABCQ_3$, three separate patents could issue, perhaps with differing inventive entities. *See In re Kaplan*, 789 F.2d 1574, 229 USPQ 678 (Fed. Cir. 1986) (independently derived best mode created an independently patented invention even though it was described in an earlier patent).

The inventor then markets a device covered by claim $ARCQ_1$. Competitors—unable to acquire a license—deliberately market devices which literally infringe claims $ABCQ_2$ and $ABCQ_3$. According to the dissenting opinion, the inventor cannot recover his lost profits for this infringement. The inventor instead must, in effect, grant a compulsory license to willful infringers. Moreover, the infringers have an incentive to infringe to acquire what the market does not supply, a mandatory license.

The potential for increasing the complexity of patent litigation is especially disturbing. The inventor would have to prove that its own product falls under the patent. Infringers would escape lost profits and acquire a mandatory license by showing the inventor's product is not within the claims. The length, cost, and complexity of an infringement trial would conceivably double. The damages phase of a trial would feature an entire new issue of "reverse infringement." The inven-

tor would have to show that the patent's claims read on the inventor's own product, while the infringer would try to show they do not. Once again, as a precondition for lost profits, the parties would parse the claims and call on experts to apply the claim language to an unaccused device.

The language of the 1952 Act did not contemplate creation of an entire new issue of "reverse infringement." The language of the Patent Act recognizes that the value of a claim to the patentee, and the extent of harm from infringement, do not depend on whether the patentee markets the claimed device. To adequately compensate for infringement of the right to exclude, as section 284 requires, "damages" includes lost profits on competing products not covered by the infringed claims.

III. Application of the "But For" Standard

To recover lost profits damages for patent infringement, the patent owner must show that it would have received the additional profits "but for" the infringement. The patent owner bears the burden to present evidence sufficient to show a reasonable probability that it would have made the asserted profits absent infringement. *See, e.g., Del Mar Avionics, Inc. v. Quinton Instr. Co.*, 836 F.2d 1320, 1326, 5 USPQ 1255, 1260 (Fed. Cir. 1987). This court has prescribed no one particular method by which the patent owner must meet this burden; "the methodology of assessing and computing damages is committed to the sound discretion of the district court." *State Indus., Inc. v. Mor-Flo Indus., Inc.*, 883 F.2d 1573, 1576-77, 12 USPQ2d 1026, 1028 (Fed. Cir. 1989), *cert. denied*, 493 U.S. 1022 (1990).

To prevail in its appeal of the amount of damages imposed, Tapematic must show that the district court committed an abuse of discretion, basing the award on clearly erroneous factual findings, legal error, or a manifest error of judgment. *State Industries*, 883 F.2d at 1577.

In determining the amount of damages to which King was entitled, the district court considered:

> (1) the number of lost sales; (2) the gross receipts King would have obtained from the lost sales had there been no infringement by Tapematic; (3) the cost of sales to be deducted from gross receipts: and (4) King's profit on the lost sales.

King, 737 F. Supp. at 1241.

The district court determined that King controlled 70% of the tapeloader market prior to Tapematic's infringement. The district court also found that Tapematic sold 77 infringing machines (Tapematic Model 2,002). *Id.* The district court determined that, absent Tapematic's infringing Model 2,002, buyers would have purchased replacements according to the other sellers' market share. Because King controlled 70% of the market, the district court initially determined that King could have made 70% of those replacement sales. *Id.* at 1242.

The district court then took into account the differences between the Tapematic Model 2,002 and the King Model 790. The Tapematic 2,002 is a double, not a single, pancake loader. Therefore, Tapematic argued that its customers would not have bought a single pancake loader like the King Model 790. Giving some weight to this argument, the district court reduced the number of King's lost sales. The district court also awarded King lost profits on the spare parts for the machines it would have sold but for Tapematic's infringement. *Id.*

The district court also found that the machines which, but for Tapematic's sales, would have been sold by companies other than King were acceptable noninfringing alternatives. The district court determined that King was entitled to a reasonable royalty based on Tapematic's sales price and the number of these machines. Finally, the district court gave King prejudgment interest at the rate of 11%.

This court finds no clear error or abuse of discretion in the district court's careful analysis. Accordingly, this court affirms the district court's damages assessment. *See State Industries*, 883 F.2d at 1577.

CONCLUSION

Because it detects no clear error, this court affirms the district court's finding of infringement of the '461 patent. Similarly, this court detects no clear error and affirms the district court's findings that Tapematic has not infringed either the '153 or the '123 patent. Finally, this court detects no clear error or abuse of discretion and affirms the district court's damages assessment.

COSTS

Each party shall bear its own costs for this appeal.

AFFIRMED

UNITED STATES COURT OF APPEALS
FOR THE FEDERAL CIRCUIT

Docket No. 91-1125,-1132

KING INSTRUMENT CORPORATION,

Plaintiff-Appellant,

—v.—

LUCIANO PEREGO and TAPEMATIC,

Defendants/Cross-Appellants.

NIES, *Circuit Judge,* dissenting-in-part

In *Rite-Hite* v. *Kelley*, 56 F.3d 1538, 35 USPQ2d 1065 (Fed. Cir 1995) (*in banc*), this court divorced lost profit damages from injury to the patentee's business in goods protected by the infringed patent. A patentee was held entitled to damages based on lost trade in its goods protected under an unlitigated patent which competed with the infringing goods. In this case, the panel majority eliminates the *Rite-Hite* requirement for the patentee to put out, at least, a competitive counterpart for the infringing product. Under this decision, any economic loss to a patentee's business is held legally compensable as damages for patent infringement. The court has now twice declared that the remedy Congress has provided of damages calculated as a reasonable royalty are inadequate and judicially fashions a better one for patentees which conforms to the majority's view of the public interest.

The panel majority holds that the district court did not "abuse its discretion"[1] in awarding the patentee King lost profits based on King's share of the tape loader market, which it held at the time of Tapematic's infringement of U.S. Patent No. 3,825,461 (the '461 patent). The infringed '461 patent covers a splicer head assembly for use as part of a tape loader. The award was calculated based on the profit margin on King's model 790 tape loader, a device which does not use the technology of the '461 patent. In addition, lost profits were awarded on spare parts for King's unpatented machines. For convenience I will refer to King's 790 tape loader as "unpatented," meaning that it does not embody the invention of the infringed '461 patent. However, the 790 machine may be covered by other extant, expired, or invalidated patents in King's portfolio. *See King Instrument Corp.* v. *Otari Corp.*, 767 F.2d 853, 226 USPQ 402 (Fed. Cir. 1985), *cert. denied*, 475 U.S. 1016 (1986) ("Otari") (U.S. Patent No. 3,737,358 on a "shift block" splicer held invalid.).

The *Rite-Hite* court ruled that patent infringement damages under 35 U.S.C. § 284 encompass profits lost by the patentee in its business in goods which compete with the infringer whether or not the patentee's goods embody the invention of the patent in suit. The *in banc* court rejected the argument that legal injury for loss of trade was limited to diversion of business from the patentee's market in the patented goods in issue. Under the *Rite-Hite* decision, a patentee may be awarded lost profits without proving that the invention created consumer demand for the goods which the patentee would have satisfied but for the infringement. The *in banc* court interpreted the statute to provide "only a lower limit of a reasonable royalty and no other limitation" on patent infringement damages. *Rite-Hite*, 56 F.3d at 1544. The *in banc* court also declared the policy of encouraging the patentee to commercialize patented inventions by the "carrot" of damages for injury to its market in patented goods is not

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[1] For a discussion of the standard of review for patent damages applied in our court, *see SmithKline Diagnostics, Inc.* v. *Helena Lab. Corp*, 926 F.2d 1161, 1163-65, 17 USPQ2d 1922, 1924-25 (Fed. Cir. 1991).

meaningful or persuasive.[2] Rejecting all arguments based on the statute, prior precedent, policy and logic, the *Rite-Hite* court ruled that lost sales in the patentee's business in competitive goods which were protected not by the patent in suit but by an unasserted patent were "legally compensable." The *Rite-Hite* decision went on to opine (albeit *in dicta)* that a patentee's lost sales of goods in the public domain were equally compensable if customers would not have obtained such goods from a third party.

I reject this change in patent damages law. My reasons are more fully explained in my dissenting opinion in *Rite-Hite,* 56 F.3d at 1556-78, 35 USPQ2d at 1078-96 (in which Chief Judge Archer, Senior Circuit Judge Smith and Circuit Judge Mayer joined). I conclude that patent infringement damages for loss of trade depend on injury to the patentee's market in goods utilizing the invention of the infringed patent. A patent grants the patentee a legal right to a protected market only for patented goods. A patent does not grant the patentee a right to a protected market in unpatented goods. A patent entitles the patent owner to the fruits of the invention, not the fruits of the patentee's business generally. In sum, lost profits are not a legal injury, but only a measure of damages for a legal injury. To constitute legal injury to a patentee's business for which lost profits may be awarded for patent infringement, the patentee must have a market in the patented goods from which sales were diverted by the infringer. Further, it must be proved that, but for the infringer's acts, the customers would have bought the patented goods from the patentee because of the customer demand *for the patented invention.* Absent such proof, the patentee is entitled to damages calculated as a reasonable royalty for the use of the invention made by an infringer. 35 U.S.C. § 284. Such award satisfies the requirement for "full compensation" recognized in *General Motors*

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[2] The court found encouragement to practice the invention in the possibility of denial of an injunction, a possibility so remote as to be ludicrous. Moreover, treble damages are assessable where infringement is deliberate. Use of the invention by others merely because no injunction is in place is outside the world of reality.

Corp. v. *Devex Corp.*, 461 U.S. 648, 653-54, 217 USPQ 1185, 1187-88 (1983).

The Supreme Court stated the principle over 100 years ago in *Crosby Steam Gage & Valve Co.* v. *Consolidated Safety Valve Co.*, 141 U.S. 441, 452-53 (1891), that, to recover for loss of trade, a patentee must prove it was "putting on the market goods embodying the [patented] invention." *See also*, *Seymour* v. *McCormick*, 57 U.S. (16 How.) 487 (1854) (actual damages depends on patentee's commercial exploitation of the patented product either by satisfying the market demand or licensing); *Rude* v. *Westcott*, 130 U.S. 152, 165-67 (1889); *Yale Lock Mfg.* v. *Sargent*, 117 U.S. 536, 552-53 (1886). Apparently, the majority of this court assumes that the Supreme Court would overturn this precedent because of the statement in the *Devex* case cited above that, under the present Act, a patent owner is entitled to "full compensation for 'any damages' he suffered as a result of the infringement." However, the Supreme Court has to date pronounced no expansion in the legal scope of "damages," which all circuits, except this one, have followed.[3] It ill behooves this court to anticipate that the Supreme Court will overturn controlling precedent. *Rodriguez de Ouijas* v. *Shearson/American Express, Inc.*, 490 U.S. 477, 484 (1989) ("If a precedent of this Court has direct application in a case, yet appears to rest on reasons rejected in some other line of decisions, the Court of Appeals should follow the case which directly controls, leaving to this Court the prerogative of overruling its own decisions."). Supreme Court precedent unequivocally holds that lost profits awards are reserved solely for injuries caused by an infringer's interference with the patent owner's trade in goods embodying the invention of the infringed patent.

The *in banc* court remanded this appeal, which also had been taken *in banc.* for decision in accordance with *Rite-Hite* by the original panel. However, the majority of the panel

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[3] *See Rite-Hite*, 56 F.3d at 1567-68, 35 USPQ2d at 1087-88 (Nies, J., dissenting), reviewing decisions of other circuits which uniformly hold that a patent protects a patentee's market only for those goods embodying the invention of the infringed patent.

makes a quantum leap from *Rite-Hite* in expanding the scope of legal injuries for patent infringement. As will be more fully explained, the infringed patent is used in an optional accessory for the infringer's tape loader, a reel changer, an accessory for which the patentee offers no counterpart. In addition, the invention, a splicer head, is only a part of the reel changer. The majority ignores the requirement for proof that the patented splicer head provides the commercial magnetism for the entire device. Where a patented invention is only a part of the infringing machine, the patentee must show " 'that the profits and *damages* are to be calculated on the whole machine, for the reason that the entire value of the whole machine, as a marketable article, is properly and legally attributable to the patented feature.' *Garretson* v. *Clark*, 111 U.S. 120." *Westinghouse Co.* v. *Warner Mfg. Co.*, 225 U.S. 604, 615 (1912) (emphasis added); *accord Marconi Wireless Telegraph Co.* v. *United States*, 320 U.S. 1, 50 (1943) (defendant not liable for "non-infringing and valuable improvements which had contributed to the making of the profits."); *see also Sheldon* v. *Metro-Goldwyn Corp.*, 309 U.S. 390, 400-405 (1940) (analyzing patent and copyright damages). The "entire market value rule," as it is known, surfaces only in a footnote in the majority opinion and is not applied. However, as reaffirmed in *Rite-Hite*, 56 F.3d at 1549-50, the entire market value rule permits recovery of damages on the value of an entire machine only where the patent-related feature is the basis for customer demand.

The majority panel opinion is strangely devoted to justification of the *in banc* ruling on damages in *Rite-Hite* which, of course, needs no endorsement by this panel. In contrast, the majority is virtually silent on the justification for the award of lost profits on the facts of this case to which I turn.

The Facts

King and Tapematic market machines called tape loaders that cut, splice and wind magnetic audio or video tape into closed cassettes. The magnetic tape must be spliced to leader

tape affixed to the winding hubs in the cassette. King charged Tapematic with infringement of its U.S. Patent Nos. 3,637,153 and 3,997,123 directed respectively to a tape loader and to a more automated version thereof. The majority affirms that Tapematic's tape loaders are not infringements of those patents.

In addition to the uninfringed '153 and '123 patents, King also charged Tapematic with infringement of a third patent, U.S. Patent No. 3,825,461 ('461 patent), which is directed to a particular splicing head assembly for connecting magnetic tape to leader tape in a tape loader. Neither King nor Tapematic use this invention in a tape loader. As an optional accessory to its tape loader, Tapematic provides a reel changer that automatically switches to and splices a second reel of magnetic audio or video tape when the first reel runs out. Obviously, a reel changer splices magnetic tape to magnetic tape. A different type of splice is used in this procedure from that required for splicing magnetic tape to leader tape in the tape loader. However, the majority construes one claim of the '461 patent, which is written in broad "means-plus-function" terms (35 U.S.C. § 112, ¶ 6), to cover the splicing of magnetic tape to magnetic tape in a reel changer. The splicing head used in Tapematic's reel changer is found to be an equivalent of the splicing head assembly disclosed in the '461 patent and is held to be an infringement within the construction it gives the claim language under section 112, ¶ 6.

No Competitive Products

Assuming that the finding that Tapematic's splicing head in its reel changer infringes the '461 claim is correct,[4] it does not follow that lost profits are awardable under *Rite-Hite* for King's losses in sales of its *tape loader*. Under *Rite-Hite*, King would have to, at least, offer a *reel changer*. King offers no reel changer—competitive or otherwise—for its own tape loader. Similarly, the award of lost profits on unpatented

[4] Tapematic challenges the expansive legal interpretation given to the scope of the claim under which it is found to infringe.

spare parts for an unpatented machine does not meet the requirement in *Rite-Hite* for proof of competition between the unpatented product and goods of the infringer. There is no allegation or finding that Tapematic competed with spare parts. Thus, the awards of lost profits here expand upon the *Rite-Hite* ruling.

The Entire Market Value Rule

When a patentee either seeks damages on an entire machine where its patent covers only a patented component or seeks damages for lost sales of unpatented goods sold along with a patented device ("convoyed" sales), a patentee must satisfy the entire market value rule, that is, the patentee must prove that the patent-related feature is the basis for customer demand for the unpatented parts to which it seeks to extend its damages. *Westinghouse*, 225 U.S. at 615. In *Rite-Hite*, the *in banc* court reaffirmed the viability of the entire market value rule and imposed a further limitation that "convoyed" sales must bear a functional relationship with the patented goods. In *Rite-Hite*, lost profits were awarded for the patentee's lost sales of truck restraints, a device which holds a vehicle to a loading dock, (even though protected only under an unasserted patent) and lost profits were denied on "convoyed" sales of a loading dock leveler.

Perhaps the panel majority here did not attempt to apply the entire market value rule to a lost profits award involving a patentee's unpatented goods because it makes no sense. This is a classic case where apportionment of a defendant's ill-gained profits in an equitable accounting and of a patentee's claim for its own lost profits as actual "damages" would have been required under earlier statutes.[5] *Dobson* v. *Dornan*, 118

[5] The panel implies that prior to 1946, a patentee could recover under R.S. § 4921 both its own damages and the infringer's profits. Not so. No double recovery was ever allowed. The equity court would award "damages" (the equity courts were given special power to award "damages" by Act of 1876) only when a patentee's actual losses exceeded the defendant's profits. *See Georgia-Pacific Corp.* v. *United States Plywood Corp.*, 243 F. Supp. 500, 516-46, 146 USPQ 228, 242-54 (S.D.N.Y.

U.S. 10, 6 S.Ct. 946, 30 L.Ed. 63 (1886); *Dobson* v. *Hartford*, 114 U.S. 439, 444-46, 5 S.Ct. 945, 947–49, 29 L.Ed. 177 (1885). Because a patentee was entitled only to the defendant's profits and/or its own lost profits to the extent attributable to its patented invention, and because of the virtual impossibility and difficulties of apportionment to reflect that amount, Congress was persuaded to change the statute.[6] Congress expressly did away with equitable accountings for the defendant's profits, which was the usual starting place for determination of compensation. At the same time, Congress provided that damages may be calculated as a reasonable royalty in all cases. The statute was not otherwise changed respecting "damages." Either Congress intended to maintain apportionment of actual "damages" or it intended that "damages" be awarded as a reasonable royalty in lieu of apportionment. Congress did not eliminate the prior restriction for apportionment of a patentee's lost profits in calculating "damages." *See Devex*, 461 U.S. at 653-55 ("appropriate to infer that Congress intended to adopt the established judicial interpretation.")

Our case law, pre-*Rite-Hite*, dealt of course with the entire market value rule only in connection with the patentee's claim for lost profits on its own goods of which the patented invention was a part. "[T]he entire market value rule . . . permits recovery of damages based on the value of a [patentee's] entire apparatus containing several features, where the patent related feature is the basis for consumer demand." *State Indus.* v. *Mor-Flo Indus.*, 883 F.2d 1573, 1580, 12 USPQ2d 1026, 1031 (Fed. Cir. 1989); *TWM Mfg. Co.* v. *Dura Corp.*, 789 F.2d 895, 900-901, 229 USPQ 525, 528 (Fed. Cir.), *cert.*

1965), for an extended analysis of statutory remedies in successive patent statutes.

[6] At the Congressional hearings of the 1946 statute, Patent Office officials explained that "[d]amages in a legal sense means the compensation which the law will award for an injury done." House Hearings at 9. With respect to the restriction of profits created by the invention, there was total agreement that "those [are] the only profits to which the patentee is entitled." *Id.* at 3 (Fish letter introduced by Hon. Robert K. Henry, Member of Congress).

denied, 479 U.S. 852 (1986). The *Rite-Hite* court did not explain how the entire market value rule should work when dealing with a patentee's claim for lost profits on its unpatented goods and the defendant's device contains only an infringing feature, as here. In this context, I find the application of an entire market value rule mind-boggling. Obviously the patented splicer head did not create demand for King's tape loader because that type of splicer is not used at all in the patentee's goods. Assuming the *in banc* court meant that the patentee gets the entirety of its lost profits on a competitive unpatented product if the patented component is the basis for consumer demand for the infringer's goods (the logic of which escapes me), then the lost profit award here fails for lack of proof. Indeed, King did not attempt to prove, and does not even argue, that the patented invention created demand for the infringer's reel changer, much less its tape loader, or for the spare parts. The district court found that numerous noninfringing products were available. *King Instrument Corp.* v. *Perego*, 737 F. Supp. 1227, 1242 (D. Mass 1990). King argues only that "but for" the competition from Tapematic's admittedly improved tape reeler with a reel changer, the "dual pancake" device, King would have kept its share of the market with its "single pancake" tape loaders.[7] King proved no actual loss of sales to the infringer because of the public's demand for the patented splicer technology.

The award of the patentee's lost profits on spare parts for its unpatented machine reveals the full extent of the change in the law by this panel. In *Otari, supra,* which involved the '153 King patent, one of the patents asserted here but not infringed, King was awarded lost profits on its tape loader which did embody the '153 invention. In addition, King sought lost profits on sales of unpatented spare parts it expected to sell along with its patented tape loader. In overturning the damages awarded in connecting with injury to King's spare parts business, this court explained:

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[7] While this court has approved a market share award of lost profits, heretofore the market share was based on the patentee's share of the market based on patented products augmented by shares of infringers and licensees. *State Indus., supra.*

> King asserts that its spare parts . . . are parts which it normally sells with the patented swing arm machine. Such simplistic outlook fails to perceive the underlying significance of the entire market value rule, which was accurately applied by one of our predecessor courts in Leesona Corp. v. United States, supra. In defining those spare parts for which a patent owner may recover, the Court of Claims recognized that parts [must] . . . derive their existence and value from the patent.

Otari, 767 F.2d at 865, 226 USPQ at 411; *See also Leesona Corp.* v. *United States*, 599 F.2d 958, 975, 202 USPQ 424, 440 (Ct. Cl.), *cert. denied*, 444 U.S. 991 (1979) (award of compensation made on unpatented replacement anodes part of patent value where patented "battery's very uniqueness . . . lies in replacing anodes to be recharged"). Having just reendorsed the entire market value rule, it is anomalous in the extreme that this court now approves lost profits for injury to King's spare parts business for an unpatented machine when this court in *Otari* denied damages for injury to King's spare parts business for its *patented* machine. The entire market value rule is simply jettisoned in this case. However, the panel has no license to change prior precedent.

Additional Comments

With respect to this panel's substitute analysis of the statute for that of *Rite-Hite*, a few comments are in order.

The panel majority posits that the language of section 154 of the Act of 1952 clarified that a patent empowers its owner to exclude others from practicing the invention and that the damages action, section 284, protects the right to exclude, not the right to exploit.[8] While correct, actual damages, never-

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[8] *See Aro Mfg. Co., Inc.* v. *Convertible Top Replacement Co.*, 377 U.S. 476, 505, n.20, 141 USPQ 681, 693, n.20 ("In the 1952 codification, §§ 67 and 70 of the 1946 Code were consolidated in the present § 284. The stated purpose was merely the 'reorganization in language to clarify the statement of the statutes,' " quoting H.R. Rep. No. 1923, 82nd Cong., 2d Sess. at 10, 29 (1952)).

theless, depend on the patentee's manner of exploitation, *i.e.*, manufacturing or licensing. The right to exclude is not "injured" by an infringer, anymore than a landowner's right to exclude is "injured" by a trespasser. The right to exclude remains enforceable to its fullest. A trespasser can inflict injury only on the property on which the trespass is committed, for example by cutting the trees. Similarly, a patent infringer cannot injure the patent itself, but only property rights protected by the patent, namely, the patentee's exclusive market for patented goods.

The majority states that "inventors have a natural right to exploit their inventions apart from any government grant. Therefore, patent rights do not depend upon the exercise of rights already in the patentee's possession. [A patent] does not confer the right to exploit the invention already possessed by the inventor." Slip op. p. 12. However, if an inventor merely exercises his natural right to exploit his invention without a patent, once the product is in the market, all competitors have the same right. *Bonito Boats* v. *Thunder Craft Boats*, 489 U.S. 141, 156 (1989). A patent provides what an inventor's natural right does not—namely, a right to exclusivity in the market place during the patent term. The patent right to exclusivity is far different from the natural right to exploit an invention.

The panel majority next proclaims that requiring the patentee's "exploitation of the claimed invention for a recovery of lost profits would cause a systematic failure to award 'damages adequate to compensate for the infringement.' " Slip op. at 15. Such a requirement, according to the majority, "would force patent owners to accept a reasonable royalty in cases where a reasonable royalty is inadequate compensation" and would amount to a compulsory license. At the same time the majority approves the anathema of a compulsory license in this case. Damages are calculated as a reasonable royalty for the 30 percent of Tapematic's sales for which lost profits were not awarded. The short answer is that the award of a reasonable royalty as damages is not a license, but is simply a method of calculating damages. *Dowagiac Mfg. Co.*, 235 U.S.

at 649; *Devex*, 461 U.S. at 652 n.5. As I stated in *Rite-Hite*, 56 F.3d at 1574, 35 USPQ2d at 1093, "[a] reasonable royalty is in fact a Congressional largesse for cases where a patentee might otherwise receive only nominal damages. A patentee is now statutorily entitled to a reasonable royalty even though it has not suffered or cannot prove a financial loss to its market in patented goods."

The panel majority's discussion of damages in the form of a reasonable royalty concludes with the pronouncement that a reasonable royalty encourages infringement and quotes *Stickle* v. *Heublein, Inc.*, 716 F.2d 1550, 219 USPQ 377. Noting the language is attributable to me as author, I must acknowledge the inartfulness of some of my language. However, *Stickle* says no more than that a reasonable royalty for an infringer is not a normal, routine, or established royalty.[9] Supreme Court precedent on damages calculated as a reasonably royalty better explains the concept. *See Dowagiac Mfg.*, 235 U.S. at 648-50. In any event, where infringement is innocent as here, the amount of damages cannot operate as a "deterrent," except as a brake to legitimate challenges to a charge of infringement. A patent now hangs like the sword of Damocles over competition with unpatented goods and serves as a powerful means for extortion. In contrast, Congress has provided a balanced rational system of penalties and rewards. All infringers are liable for damages, either actual or a statutory royalty award. Innocent infringement theoretically may be profitable where damages are calculated as a reasonable royalty. (See *Hanson* v. *Alpine Valley Ski Area, Inc.*, 718 F.2d 1075, 1081, 219 USPQ 679, 684 (Fed. Cir. 1983) (it is

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[9] What the majority omits from its reference to *Stickle*, however, are my comments relating to damages:

> Contrary to [the defendant's] argument, damages to the patent holder cannot simply be calculated in all cases by determining 'the difference between his pecuniary condition after the infringement, and what his condition would have been if the infringement had not occurred. [citation omitted]. *In the absence of exploitation by the patent holder, no damages would be awardable.*

Stickle, 716 F.2d at 156-61 (emphasis added).

implicit that a reasonable royalty leaves an infringer with a reasonable profit); *Georgia-Pacific Corp.* v. *United States Plywood Corp.*, 318 F. Supp. 1116, 1122, 166 USPQ 235, 239 (S.D.N.Y. 1970) (reasonable royalty leaves a profit margin). That was the choice Congress made. The evil, which Congress discerned, was *knowing* infringement. Where infringement is willful, damages may be increased up to three times. Here, damages for innocent infringement are increased more than ten times over the statutory entitlement.[10]

A reasonably royalty is adequate damages where a patentee is in the market with patented goods but along with competitive noninfringing substitutes which would have shared the infringing sales, *Panduit Corp.* v *Stahlin Bros. Fibre Works, Inc.*, 575 F.2d 1152, 1157-60 (6th Cir. 1978), as well as for patentees who do not exploit the market for the patented goods. *Id.* What Congress has so fixed by statute cannot be inadequate.

In note 2, the panel decrees that all economic harm to the patentee is compensable as "a direct and foreseeable result of infringement." Congress disagrees. To recover any damages-lost profits or a reasonable royalty—a manufacturing patentee must mark its products with a notice of patent rights or provide actual notice of infringement. 35 U.S.C. § 287 (1988). The products on which King receives lost profit damages are not marked and could not be marked with notice that they are protected by the '461 patent. Further, no actual notice of infringement of the '461 patent was given prior to the date from which damages are awarded. The award here conflicts with section 287.

One final comment. In *Continental Paper Bag Co.* v. *Eastern Paper Bag Co.*, 210 U.S. 405, 424-430 (1908), the Supreme Court held that commercialization of an invention was not necessary for an injunction against infringement. The panel majority cites another equity case which held that a patent could not be refused on the ground it might be used

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[10] A reasonable royalty was fixed at $1,100 per unit of infringing sales, whereas lost-profits amounted to $14,400 per unit. *King*, 737 F. Supp. at 1242.

only to protect another patented invention of which it was a part. *Special Equipment Co.* v. *Coe, Comm'r of Patents*, 324 U.S. 370 (1945). A majority of the court believes it follows that disclosure of an invention is, in itself, sufficient for damages to a patentee's business in unpatented goods. However, an injunction is directed to the equity power of the court and may be denied. *Rite-Hite*, 56 F.3d at 1071. Damages are provided by a rule of law respecting what constitutes legal injury and may not be refuscd as a matter of the court's discretion. The majority compares apples and oranges. To amplify the words of the panel with appropriate inserts: "The economic rewards [from the patented invention] during the period of exclusivity are the carrot. The patent owner expends resources in expectation of receiving this reward. Upon grant of the patent, the only limitation on the size of the carrot should be the dictates of the marketplace [for the patented invention]." Slip op. 13. in the present case, while the market has provided a carrot that King disdains, the panel majority, contrary to its admonition to let the market determine rewards, furnishes King with a full course meal. Despite two hundred years of our patent system without such awards, there is no evidence of a systematic failure which the majority elevates to one of constitutional dimension. If anything, the systemic failure now goes the other way. The public is deprived of the benefits of the invention during the term of the patent while the patentee is assured its market share of profits on unpatented goods if it keeps the invention from the public. This is not the bargain Congress intended by granting the patentee an exclusive market for the patented goods.

In the majority view, "[u]nder this situation [an award of damages connected to unpatented products], the Patent Act is working well." Slip op. p. 14. I disagree. Only if one elevates rewards to patentees over other public interests could one reach this conclusion. And it is not the view espoused by the Supreme Court. Contrary to the majority, *Aro Mfg. Co.*, 377 U.S. at 505-507, 141 USPQ at 693-94, did not expand the basis for actual damages "to cover any pecuniary injuries" to a patentee's business including lost profits on unpatented

goods as the majority asserts. Slip op. at 11. In rejecting that expansive view of patent infringement damages, the *Aro* Court stated that the patentee's damages theory "would enable the patentee to derive a profit . . . on *unpatented rather than patented goods*—an achievement proscribed by the *Motion Picture* Patents [243 U.S. 502] and *Mercoid* [320 U.S. 661] cases." *Aro*, 377 U.S. at 510 (plurality). As stated in *Aro*, and prior Supreme Court precedent, a patentee is unequivocally not entitled to lost profits on unpatented goods.[11]

Congress made the policy choice that the "carrot" of an exclusive market for the patented goods would encourage patentees to commercialize the protected inventions so that the public would enjoy the benefits of the new technology during the patent term in exchange for granting a limited patent monopoly. In other words, the public expected benefits during " 'the embarrassment of an exclusive patent as Jefferson put it." ' *Graham* v. *John Deere Co.*, 383 U.S. 1, 10-11 (1965). As stated in *Bonito Boats*, 489 U.S. at 150-51:

> The federal patent system thus embodies a carefully crafted bargain for encouraging the creation and disclosure of new, useful, and nonobvious advances in technology and design in return for the exclusive right *to practice the invention* for a period of years.

(Emphasis added.) If the patentee did not commercialize the invention directly or by license, until now the patentee could not prove actual damages but, nevertheless, was entitled to the remedies of damages calculated as a reasonable royalty and an injunction. Now the patentee is rewarded the same as, indeed, more than, if it had made the investment to bring the goods into the market.[12] However, no legislation has ever been proposed to compensate a patentee for losses to its unpatented business in order to correct the inadequacies the

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[11] I must point out that *Aro* is a case on patent *damages*, not antitrust law, the basis on which the majority in *Rite-Hite* discounted similar statements in other precedent. 56 F.3d at 1538, 1544-46, 35 USPQ2d at 1069-70.

[12] King's profit margin was determined on an incremental basis on an established line where fixed costs had been recouped. The majority speaks of damages to recoup development costs of the invention. The record here is devoid of evidence respecting such costs.

majority sees in the legal scope of damages which have heretofore been awardable. This court has simply judicially legislated an expansion of patent rights from protection of an exclusive market in patented goods to protection of the patentee's unpatented business as well. The court does away with the "carrot" Congress determined would get new products into the economy.

I will not burden this opinion by fuller analysis of the meaning of "damages" under 35 U.S.C. § 284, which is fully set out at 56 F.3d 1556-78, 35 USPQ2d at 1078-96. I will only point out that the dissent and the majority rely on many of the same Supreme Court cases but derive from them absolutely conflicting tenets. Clarification from higher authority is needed on the scope of protection afforded by a patent and the meaning of patent infringement "damages."

UNITED STATES DISTRICT COURT
D. MASSACHUSETTS

June 18, 1990

Civ. A. No. 84-3227-H

KING INSTRUMENT CORPORATION,
Plaintiff,

—v.—

Luciano PEREGO and TAPEMATIC SrL.,
Defendants

OPINION

HARRINGTON, *District Judge.*

Plaintiff King Instrument Corporation ("King") brings this action alleging infringement of three King patents by the Defendants Luciano Perego ("Perego") and Tapematic SrL ("Tapematic").

Plaintiff King is a corporation organized under the laws of Massachusetts and having its principal place of business therein. Defendant Tapematic is a foreign corporation organized under the laws of Italy, with its principal place of business in Milan. Defendant Perego, a citizen of Italy, is the President and owner of Tapematic.

The business of all parties is the manufacture and sale of automated machines for loading magnetic audio or video tape into closed cassettes, from which activity the claims in this suit arise. King contends that Tapematic's distribution in the

United States of its tape loading machines infringes upon three King patents:

1) PAT NO.: 3,637,153 (the "153 Patent")
   TITLE: Machine Splicing and Winding Tape Into a Cassette
   ISSUED: January 25, 1972

2) PAT NO.: 3,825,461 (the "461 Patent")
   TITLE: Splicing Head Assembly
   ISSUED: July 23, 1974

3) PAT NO.: 3,997,123 (the "123 Patent")
   TITLE: Automatic Cassette Loading Machine
   ISSUED: December 14, 1976

Defendants' machines in issue are Models 900 and 900H/S (the "900 Series"), Model 2,002, and Models 3,001 and 3,002 (the "3,000 Series").[1] King further alleges that this infringement is willful and wanton.

Defendants deny that they have infringed any of the patents in suit, and alternatively assert that the patents are invalid because of prior sale and misuse of the patents. This case was tried before the Court and without a jury.

I. *Jurisdiction*

This Court has jurisdiction to resolve these disputed patent matters under Title 28, United States Code, Section 1338(a).

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[1] Specifically, with regard to the '153 Patent, King asserts that all Tapematic machines infringe claims 2, 4, 5, 9, 10, 11, 12, 15 and 16. With regard to the '461 Patent, King asserts that Tapematic Model 2,002 infringes claims 1, 2, 5, 6, 7, 11 and 12. Finally, with respect to the '123 Patent, King asserts that the 900 Series infringes claims 1, 2, 12, 22, 23, 26, 27, 30 and 35; that Model 2,002 infringes claims 1, 12, 15, 22, 23, 26, 27, 30 and 35; and that the Tapematic 3,000 Series infringes claims 1, 12, 15, 26, 27 and 35.

II. *Background*

The method and apparatus claimed by plaintiff concern the loading of closed cassettes within which are mounted two winding hubs with magnetic tape spliced at each end to leader tape which is attached to each of the hubs. To accomplish that result, a sequence of cut-shift-splice-wind-cut-shift-splice is described in the claims. This sequential process involves a means of manipulating the magnetic and leader tapes in such a fashion as to accomplish the cut-shift-splice-wind-cut-shift-splice sequence. In order to manipulate the tape, the magnetic tape must be juxtaposed to the leader tape in such a manner as to permit the splicing of the two and the subsequent winding of the tapes so spliced for a predetermined length of tape and an ultimate further juxtaposition and splicing of magnetic tape to leader tape on the other hub.

The '153 Patent describes and claims a mechanical splicing block configuration which employs swinging arms to manipulate the magnetic tape in and out of juxtaposition with the leader tape. The '123 Patent describes and claims a winding machine which fully automates the machine embodied in the '153 Patent by adding a mechanism for storing a number of cassettes to be loaded and for advancing them one at a time to the loading position. The '123 Patent also embodies a mechanism which extracts automatically the leader tape from the cassette and positions it on splicing blocks for splicing to the magnetic tape. The '461 Patent describes and claims a splicing head assembly for splicing tape by means of a diagonal shift block arrangement.

III. *Validity*

It is a well established and codified rule that a United States patent is presumed valid, and one attacking the validity has the burden of proving invalidity by clear and convincing evidence. 35 U.S.C. § 282; *Roper Corp. v. Litton Systems, Inc.*, 757 F.2d 1266, 1270, 225 U.S.P.Q. 345 (Fed.Cir. 1985);

Atlas Powder Co. v. E.I. du Pont De Nemours & Co., 750 F.2d 1569, 1573, 224 U.S.P.Q. 409 (Fed.Cir.1984).

The validity of the '153 Patent has been previously challenged and affirmed by the Federal Circuit. *King Instrument Corp. v. Otari Corp.*, 767 F.2d 853, 226 U.S.P.Q. 402 (Fed.Cir.1985), *cert. denied*, 475 U.S. 1016, 106 S.Ct. 1197, 89 L.Ed.2d 312 (1986). In *Otari*, the defendant challenged the validity of the '153 Patent under 35 U.S.C. §§ 102 and 103. After considering all the relevant prior art, the district court found that the invention claimed in the '153 Patent was not anticipated by the prior art, and also ruled that the differences between the prior art and the claimed subject matter as a whole would not have been obvious to one of ordinary skill in the tape winding art in 1969. The Federal Circuit Court affirmed. *See Otari*, 767 F.2d at 857. This Court declines to reopen the issue of validity of the '153 Patent on the ground of prior art where the Federal Circuit has acted and where additional evidence beyond that examined in *Otari* was *de minimus*.[2]

IV. *Infringement*

The plaintiff has the burden of proof to establish by a preponderance of the evidence that the accused machines have infringed various claims of the '153 Patent, the '461 Patent and the '123 Patent.

A. *Literal*

The test for literal infringement has two aspects. First, the language of the claim in issue must be interpreted by the court

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[2] Tapematic also challenges the validity of the '153 Patent on the ground that the King invention was on sale in the United States more than one year prior to the date of application for the patent in the United States. *See* 35 U.S.C. § 102(b). Defendants' evidence on this point falls far below the clear and convincing standard, and testimony to the contrary by King was supported by the evidence. This Court finds that there was no offer for sale prior to February 9, 1969 of a functional tape loading machine embodied in the '153 patent.

as a matter of law. Second, the trier of fact must determine whether the language describes, or "reads on," an accused product. *See Standard Oil Co. v. American Cyanamid Co.* 774 F.2d 448, 452, 227 U.S.P.Q. 293 (Fed.Cir.1985). The accused product is not compared with an embodiment of the patent, but rather with the language of the claims. *See Martin v. Barber,* 755 F.2d 1564, 1567, 225 U.S.P.Q. 233 (Fed.Cir. 1985).

Several of the independent claims in all of the patents utilize "means plus function" language. To interpret such functional claims, one must turn to paragraph 6 of 35 U.S.C. § 112:

> An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

Under Section 112, paragraph 6, the patentee is entitled to protection covering *equivalents* as well as the specified "structure, material or acts." *Palumbo v. DonJoy Co.*, 762 F.2d 969, 226 U.S.P.Q. 5 (Fed. Cir.1985). With respect to the part of a claim to which Section 112, paragraph 6, pertains, it "does not, in any event, *expand* the scope of the claim." *Johnston v. Ivac Corp.*, 885 F.2d 1574, 1580, 12 U.S.P.Q.2d 1382 (Fed.Cir.1989) (emphasis in original). An element of a claim described as a means for performing a function, if read literally, would encompass *any* means for performing the function. Section 112, paragraph 6, operates to cut back on the types of means which could literally satisfy the claim language. *Id.*

For a means plus function limitation to "read on" an accused device, the accused device must incorporate the means for performing the function disclosed in the specification or a structural equivalent of that means, plus it must perform the identical function. "If the required function is not

performed *exactly* in the accused device, it must be borne in mind that Section 112, paragraph 6, equivalency is not involved. Section 112, paragraph 6, plays no role in determining whether an equivalent function is performed by the accused device under the doctrine of equivalents." *Pennwalt Corp. v. Durand-Wayland, Inc.*, 833 F.2d 931, 934, 4 U.S.P.Q.2d 1737 (Fed.Cir. 1987), *cert. denied*, 485 U.S. 961, 108 S.Ct. 1226, 99 L.Ed.2d 426 (1988). "Section 112, paragraph 6, can never provide a basis for finding that a means-plus-function claim element is met literally where the function part of the element is not literally met in an accused device." *Johnston v. IVAC Corp.*, 885 F.2d 1574 (Fed.Cir. 1989).

"To determine whether a claim limitation is met literally, where expressed as a means for performing a stated function, the court must compare the accused structure with the disclosed structure, and must find equivalent structure as well as identity of claimed function for that structure." *Pennwalt Corp. v. Durand-Wayland, Inc.*, 833 F.2d at 934 (Fed.Cir. 1987) (emphasis in original), *citing Palumbo v. Don-Joy Co.*, 762 F.2d 969, 975 (Fed.Cir.1985); *D.M.I., Inc. v. Deere & Co.*, 755 F.2d 1570, 1575, 225 U.S.P.Q. 236 (Fed.Cir.1985), *appeal aff'd*, 802 F.2d 421, 231 U.S.P.Q. 276 (Fed.Cir.1986); *Radio Steel & Mfg. Co. v. MTD Products, Inc.*, 731 F.2d 840, 848 (Fed.Cir.1984), *cert. denied*, 469 U.S. 831, 105 S.Ct. 119, 83 L.Ed.2d 62 (1984).

Whether an accused device is an equivalent of that claimed in a means plus function claim is a question of fact. The Federal Circuit has recently approved the use of a three-part test for determining means plus function equivalents that has long been applied to analyses under the doctrine of equivalents:[3] Does the asserted equivalent perform substantially the same function in substantially the same way to accomplish substantially the same result? *Texas Instruments v. U.S. Intern.*

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[3] A product that does not literally infringe may nevertheless infringe under the doctrine of equivalents. For a discussion of this doctrine, see part B, *supra*.

Trade Com'n, 805 F.2d 1558, 1571, 231 U.S.P.Q. 833 (Fed. Cir.1986), *re'hng denied*, 846 F.2d 1369 (1988); *see also Graver Tank & Mfg. Co. v. Linde Air Products Co.*, 339 U.S. 605, 70 S.Ct. 854, 94 L.Ed. 1097 (1950), *re'hng denied*, 340 U.S. 845, 71 S.Ct. 12, 95 L.Ed. 620 (1950); *Palumbo v. Don-Joy Co.*, 762 F.2d at 975 n. 4 (1985). In construing a "means plus function" claim, as also in construing other types of claims, a number of factors may be considered, including the language of the claim, the patent specification, the prosecution history of the patent, other claims in the patent, and expert testimony. *Texas Instruments*, 805 F.2d at 1568; *Palumbo v. Don-Joy Co.*, 762 F.2d at 975 (Fed.Cir. 1985).

'153 Patent

Plaintiff alleges that all of defendants' machines in suit infringe the '153 Patent claims 2, 4, 5, 9, 10, 11, 12, 15 and 16. Specifically, plaintiff asserts that defendants' shift block mechanism designed to align the leader and magnetic tape for cutting, splicing and winding infringes the swing arm mechanism claimed in the '153 Patent.

All of defendants' machines use substantially the same shift block arrangement which may collectively be referred to as defendants' horizontal shift block assembly.[4] This assembly consists of two splicing blocks. The first block is fixed and contains one tape-support groove. The second block is the shifting block and contains two tape-support grooves. The

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[4] The shift block assembly on the Model 2,002 operates on a horizontal plane in relation to the vertical standing machine. The 900 Series are tabletop (horizontal) machines and the shift block assemblies operate on a vertical plane in relation to the horizontal nature of the machine. The difference in planes of the shift block assemblies may be attributed to the structure of the machine, and not the operation of the shift blocks, which for all relevant purposes is identical.

The shift block assembly on the 3,000 Series is very similar to that contained on the 2,002 machine, but it has an additional movement in that the entire shift block assembly rotates on an axis 45 degrees in order to reach the plane of the splicer. (Perego, Day 8, p. 80).

leader tape lies across both blocks whereupon it is cut into two sections by a knife unit. The blocks have a series of holes through which vacuum is applied to hold the tape in place during the operation. A means is provided for shifting one block relative to the other so as to selectively align the second groove of the second block which supports the magnetic tape with the single groove of the first block which supports one end of the leader tape. A splicing tape dispenser splices the leader tape and magnetic tape. The tape is wound into the cassette and then cut at a predetermined length. The block then shifts back to its original position, aligning and splicing the wound tape with the leader tape end located in the first groove of the second block.

In order to infringe a claim, the accused device must practice all of the elements described in the claim. Claims 2, 10 and 16 are the independent claims of the '153 Patent which plaintiff alleges defendants have infringed. The first independent claim at issue in the '153 Patent is claim 2 which comprises a series of means plus function clauses and therefore is governed by 35 U.S.C. § 112, paragraph 6.[5] By way of illustration, claim 2 of the '153 Patent is set forth below:

2. Apparatus for severing a leader tape that is attached at its opposite ends to two hubs into two leaders and for splicing said leaders to the opposite ends of a length of use tape obtained from a supply roll of said use tape, said apparatus comprising a splicing station comprising a first stationary tape support member and second and third moveable tape support members;

means for alternately shifting said second and third support members into and out of adjacent relation to said first tape support member, said first and second support members when adjacent to each other constituting a first splic-

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[5] Claims 10 and 16 are also means plus function claims and as such the foregoing Section 112, paragraph 6 analysis is equally applicable to those claims.

ing head and said first and third support members when adjacent to each other constituting a second splicing head;

a knife operable to slit tape supported on said first and second splicing heads;

means for holding said supply roll of use tape, selectively operable first and second tape-holding means for holding said leader tape on said first and second tape support members respectively;

selectively operable third tape-holding means for holding the leading end of said use tape on said third tape support member;

selectively operable splicing tape applicator means for applying a splicing tape to the adjacent ends of leader and use tapes supported by said first and second splicing heads;

selectively operable tape-winding means comprising a rotatable spindle adapted to hold and rotate one of said hubs and means for rotatably driving said spindle; and

control means for sequentially operating the foregoing means so as to effect the following operation: operating said first, second and third tape-holding means so as to hold said leader tape on said first and second support members and the leading end of said use tape on said third support member, operating said knife to slit said leader tape into a first leader held to said first tape support member and a second leader held to said first tape support member, shifting said second and third tape support members to form said second splicing head, operating said splicing tape applicator means to splice said first leader to the end of the use tape held to said third tape support member, releasing said first and third tape-holding means and rotatably driving said spindle to wind said spliced to said first leader on said one hub, reoperating said first and third tape-holding means to hold said use tape to said

second splicing head, operating said knife to slit the use tape on said second splicing head, shifting said second and third tape support members to form said first splicing head, reoperating said splicing tape applicator means to splice second leader to the trailing end of the use tape held on said first tape support member, and releasing said first and second tape holding means.

Findings of Fact and Conclusions of Law

I find under 35 U.S.C. § 112, paragraph 6, that the horizontal shift block assembly contained in all of the defendants' machines is not the "equivalent" of the pivoting swing arm assembly claimed by the '153 Patent in independent claims 2, 10 and 16.[6] Although the shift block assembly and the swing arm assembly have substantially the same function and achieve substantially the same result, the way in which they achieve this result is radically different. In comparing the accused structure with that disclosed in the specifications of the '153 Patent, the factfinder is immediately confronted with two different methods to align and splice tape. The specifications of the '153 Patent disclose a pivoting swing arm assembly which uses a reversing four-bar link mechanism

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[6] Plaintiff points to the decision of a District Court for the Northern District of California in which Judge Ingram held that Otari Corporation's tape loading machine, which employed a shift block assembly, infringed the '153 Patent at issue in that suit. The Federal Circuit affirmed the finding of infringement, *King Instrument Corp. v. Otari Corp.*, 767 F.2d 853 (Fed.Cir. 1985), but noted that, with regard to the Section 112, ¶ 6, analysis of record, there was no examination of the patent specifications, of the prosecution history or of other claims in the patent. The Federal Circuit noted that any equivalence analysis at the District Court level was slight, as the district court did not even have before it a picture of the accused device. *See Otari*, 767 F.2d at 856 n. 1, 863 and n. 7. The only evidence of record with regard to equivalence was the expert testimony of Mr. Zimmerman, who also testified for the plaintiff in this case. Because Mr. Zimmerman's testimony was not persuasive to this Court, the *Oman* decision will not prevent a finding here of nonequivalence.

with a pivoting motion operating on a single plane. The Tapematic machines, by contrast, are sliding shift block assemblies, using a single link mechanism and operating on two planes. The specifications of the '153 Patent disclose the use of three separate splicing blocks, one which is fixed and two pivoting blocks which rotate in opposite directions. The accused shift block arrangement uses only two blocks to complete the splicing operation, one which is fixed and the other which alternately shifts into alignment the leader tape and the magnetic tape. Ernesto E. Blanco, a professor of mechanical engineering at MIT and an expert witness retained on behalf of defendants, testified that from the standpoint of a mechanical engineer the two systems were "totally and radically different." (Ernesto Blanco, Trial day 23, p. 45). Plaintiff's expert witness, Warren Isom, testified that while the swing arm assembly of the '153 Patent and the horizontal shift block assemblies have the same function, the horizontal shift block machines execute the function differently. (Warren Isom, Trial day 25, p. 6). Even James King, the inventor of the '153 Patent, admitted that the shift block assembly and the swing arm assembly performed the same function in two different ways. (James King, Trial day 4, p. 81). Finally, evidence revealed that the swing arm assembly was not an effective mechanism for aligning and splicing tape, and that even before the '153 Patent was issued, King Instrument was experimenting with another shift block assembly similar to that employed by the defendants, which ultimately replaced the swing arm assembly on the King machines.

All of the independent claims of the '153 Patent which are alleged to be infringed fail because the accused devices do not perform an element in each claim, namely, the element relating to the means for aligning and splicing tape, in substantially the same way as that disclosed in the patent.[7] As the

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[7] Claim 16 of the '153 Patent does not literally specify any means for aligning tape for splicing. Although it is true that a claim need not include all elements necessary to make up a complete operative device, each claim must cover a patentable invention. *See Pursche v. Atlas*

dependent claims of a patent survive only if the independent claims are infringed, all dependent claims fail too, and this Court finds no literal infringement of the '153 Patent by the defendants under Section 112, paragraph 6.

'461 Patent

Plaintiff alleges that the Tapematic Model 2,002 infringes the '461 Patent claims 1, 2, 5, 6, 7, 11 and 12. Specifically, plaintiff asserts that the splicing assembly used to splice magnetic tape at the end of one reel to magnetic tape at the beginning of another reel infringes the splicing head assembly claimed in the '461 Patent.

Defendants' Model 2,002 is a fully automated machine which has many advanced features, including the ability to switch automatically from an empty reel of magnetic tape to a full reel of magnetic tape without stopping the machine. This feature has a profound effect on the speed and efficiency of the machine as there is no down time when a full reel of magnetic tape must be loaded. Model 2,002 has two separate splicing assemblies. The assembly used to splice magnetic tape to leader tape for the loading of each cassette is the horizontal shift block arrangement previously described in the discussion regarding the '153 Patent.

The splicing assembly used to splice the magnetic tape between the two magnetic tape reels employs one fixed block and two movable blocks and carries out the same cut-shift-splice-wind-cut-shift-splice operation as do the horizontal shift blocks. In this assembly the two movable blocks, which alternately align the end of the first reel of magnetic tape to

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Scraper and Engineering Co., 300 F.2d 467, 476 (1962). A claim must include elements that are essential to the definition of the particular invention that the claim is drawn to cover. *Id. See also Hughes Aircraft Co.* v. *United States*, 226 Ct.Cl. 1, 640 F.2d 1193, 1197-98 (1980). Claim 16 describes an apparatus for loading magnetic tape into a cassette, the essential part of which is a means by which to selectively align the magnetic tape and leader tape for the splicing and winding operation. The swing arm assembly described in the specifications is an essential element to the apparatus described in claim 16.

the beginning of the second reel of magnetic tape, move up and down in a transverse, or diagonal, motion and on a common plane. Plaintiff alleges that it is this splicing assembly which infringes the splicing head assembly claimed in the '461 Patent.

When interpreting the scope of a claim, one must first examine the language of that claim. Claims 1 and 12 are the two independent claims of the '461 Patent. Claim 1 reads as follows:

> 1. A splicing head assembly for use in splicing a recording tape to leader tapes comprising:
>
> a first tape support member having a tape-supporting surface and means cooperating with said tape-supporting surface to define a guideway for tape supported on said surface;
>
> second and third tape support members each having a tape-supporting surface and means cooperating with said tape-supporting surface to define a guideway for a tape supported on said surface, said second and third tape support means being fixed relative to one another so that their tape-supporting surfaces and the tape-supporting surface of said first member extend substantially parallel to one another and so that their guideways and the guideway of said first tape support members reside in a common plane;
>
> means for releasably holding a tape in position along each guideway; and
>
> means for providing relative reciprocal movement between said first member on the one hand and said second and third members on the other hand along an axis extending transversely of said tape-supporting surfaces of said second and third members.

Claim 1 contains four separate elements and a preamble. Traditionally, a preamble of a claim may constitute a statement of purpose for the device, or it may give additional structural

limitations to a claim. If the words of the preamble "give life and meaning" to the claim, then it may be interpreted to limit further the scope of the claim. *Corning Glass Works v. Sumitomo Elec. U.S.A., Inc.*, 868 F.2d 1251, 1257, 9 P.Q.2d 1962 (Fed.Cir.1989); *Loctite Corp. v. Ultraseal Ltd.*, 781 F.2d 861, 866, 228 U.S.P.Q. 90 (Fed.Cir.1985). Here, the '461 specifications indicate that the inventor was working on the particular problem of creating an effective splicing assembly to manipulate video magnetic tape and leader tape. To read the claim without regard to the preamble would greatly expand the scope of the claim beyond its plain meaning. I therefore conclude that the claim preamble in this instance states more than a purpose or intended use for the claimed structure and in fact gives meaning to the claim and properly defines the invention. *See Perkin-Elmer Corp. v. Computervision Corp.*, 732 F.2d 888, 896, 221 U.S.P.Q. 669 (Fed.Cir.), *cert. denied*, 469 U.S. 857, 105 S.Ct. 187, 83 L.Ed.2d 120 (1984).

With that clarification, it is clear that defendants' Model 2,002 does not infringe claim 1 of the '461 patent. Although both assemblies have as their function the splicing of tape, claim 1 is limited to a structure used to splice magnetic tape to leader tape. Defendants' assembly is used to splice magnetic tape to magnetic tape. Therefore, there is no literal infringement of claim 1 of the '461 patent.

Claim 12, the other independent claim in the '461 Patent, is a much broader claim.[8] It has no preamble restricting the

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[8] Claim 12 of the '461 Patent reads as follows:

> 12. A splicing head assembly comprising first, second and third splicing blocks, a support for said splicing blocks, means securing said first block to said support, an actuator mounted to said support having a reciprocal operating member and adapted to move said operating member from one to the other of first and second positions, means attached to said support mounting said second and third blocks for movement in a vertical plane, means connecting said operating member to said second and third blocks so that said second and third blocks move with said operating member, said first block having first tape guide means for

claim to the splicing of magnetic tape to leader tape. Defendants' splicing assembly "reads on" all of the elements of claim 12 and therefore literally infringes the '461 Patent.

Defendants argue that the '461 Patent only covers splicing assemblies which have as their function splicing video magnetic tape to video leader tape. Defendants argue correctly that the claims must be interpreted in light of the specifications and point out that a specific object of the invention protected by the '461 Patent, as set forth in the specifications, is to "provide a splicing head assembly for machines for splicing and winding magnetic recording tape, the splicing head assembly being compact, fast-acting and particularly adapted for handling video tape." Plaintiff's Exh. 47; col. 1, lines 34-38. Furthermore, the specifications point out that this invention was intended to replace other splicing assemblies used in video loading machines that could not accommodate the extent of lateral movement involved in shifting the movable splicing block to align video tape. Because defendants' assembly operates to splice audio magnetic tape to audio magnetic tape, and because it is not used in the cut-shift-splice-wind-cut-shift splice manipulation, they argue that the function and result are substantially different and therefore there is no infringement of the '461 Patent.

The specifications do not so limit the protection granted by the '461 Patent to the splicing of video magnetic tape to video leader tape. The patent is entitled "Splicing Head Assembly." Its primary object as set forth in the first column is "to provide a new and improved apparatus for splicing tape." Plaintiff's Exh. 47; col. 1, lines 29-30. Although the specifications

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positioning a first tape on said first block, and said second and third blocks having second and third tape guide means for positioning second and third tapes on said second and third blocks respectively so that one of said second and third tapes is aligned with the tape positioned on said first block when said operating member is in one of said first and second positions and the other of said second and third tapes is aligned with the tape positioned on said first block when said operating member is shifted to the other of said first and second positions.

reveal that the motivation behind developing this invention may have been problems associated with splicing video magnetic tape and leader tape, the grant is nowhere limited by the type of tape to be spliced.

Finally, defendants argue that by reference to limitations in other claims of the '461 Patent, it is obvious that the entire patent is limited in scope to splicing assemblies for splicing video magnetic tape to video leader tape. Although reference to other claims may be proper when interpreting a claim in dispute, limitations of other claims may not be read onto a broader claim in order to escape infringement. *D.M.I., Inc. v. Deere & Co.*, 755 F.2d at 1574 (1985), *and cases cited.* Claim 12 is a much broader claim than claim 1 and shall not be narrowed in scope by limitations found in other claims.

'123 Patent

King's third patent in suit is the '123 Patent. There are four independent claims at issue. King alleges that defendants' Tapematic 900 Series and Model 2,002 infringe independent claims 1, 12, 30 and 35. King also alleges that defendants' 3,000 Series infringe claims 1, 12 and 35. Plaintiff does not allege literal infringement of claims 30 or 35 but relies on the doctrine of equivalents for a finding of infringement. First, this Court will consider whether any of defendants' machines literally infringe claims 1 and 12 of the '123 Patent.

The invention claimed in the '123 Patent automated the machine claimed in the '153 Patent in substantially two ways. First, the '123 Patent includes a means by which to withdraw the leader tape from a cassette and to position it on the splicing assembly. The '153 Patent claimed no such device, and that operation was previously done manually. Second, the '123 Patent includes a means by which to store a number of cassettes which automatically advances them one at a time into the loading position. This operation was also previously done manually.

Plaintiff argues that under Section 112, paragraph 6 analysis defendants' leader extractors and positioners in each of

their machines are the equivalent of the leader extractor and positioner mechanism claimed in the '123 Patent. A brief description of the accused mechanisms in each of the defendants' machines is in order.

The Tapematic 900 Series machine operates on a horizontal plane. There are a series of steps involved to extract the leader tape from the cassette and position it on the splicing blocks. First, when the cassette is in its loading position, an aspirator advances towards the open end of the cassette and vacuums out a small loop of leader tape. Next, a pin attached to an arm is positioned inside the loop. The arm then pulls the leader tape in an arc motion across the machine and places the leader onto the vacuum head of the splicing blocks. At this stage the cassette is ready for the splicing operation.

The Tapematic 2,002 machine operates on a vertical plane, and here too the manipulation of the leader from the cassette to the splicing assembly involves several steps. When the cassette is in the loading position, an aspirator advances out of the machine and is positioned under the open end of the cassette. The aspirator then extracts by vacuum a small loop of leader tape. Next, a pin attached to a carriage is inserted into the loop and the aspirator retreats back into the wall of the machine. The carriage then causes the pin to pull the tape across the machine. The whole carriage mechanism shifts downward to position the leader tape over the splicing blocks. Vacuum is applied to hold the leader tape against the blocks. The carriage then shifts back upward, moving the top side of the leader tape out of the way of the cut-shift-splice operation.

The Tapematic 3,000 Series machines, which load video magnetic tape into V-0 cassettes, extract and position the leader tape by another method specifically adapted to the video cassette, which has a very short leader tape. The cassette has a protective lid that is flipped open when in the loading position, exposing two hubs. In this operation, there are two pins which are linked to two pivoting arms. The pins penetrate the cassette under the leader tape and lift the leader

tape out of the cassette and up to the splicing blocks, which are upside down. No air or vacuum is used during this process and the splicing operation takes place directly above the cassette.

The moveable leader extractor mechanism for withdrawing the leader from a cassette located at the loading position and for positioning the leader on the splicing blocks contained in the clauses of independent claims 1 and 12 of the '123 Patent withdraws the leader tape from the cassette by means of a moving vacuum chamber and precisely positions the leader on the splicing block assembly. The language of claims 1 and 12 which describe the leader extracting and positioning feature is as follows:

Claim 1:

> reciprocally movable leader extractor means for withdrawing the leader from a cassette located at said loading position and positioning said leader on said splicing block means, said leader extractor means comprising a leader extractor member which is movable relative to said splicing block means toward and away from said loading position;

Claim 12:

> reciprocally movable leader extractor means for withdrawing the leader from a cassette located at said loading position and positioning said leader on said splicing block means. . . .

I find, as a matter of fact, that the leader extracting and positioning mechanisms in the Tapematic machines operate in a substantially different way than that claimed in the '123 Patent. The specifications of the '123 Patent disclose a single mechanism for performing the extracting and positioning of the leader tape. This mechanism is a vacuum chamber attached to a carriage which, in one movement, vacuums the leader tape out of the cassette and holds the tape while the carriage pulls the vacuum chamber across to the loading posi-

tion. While claims 1 and 12 describe the extracting and positioning of the leader tape in the '123 Patent by one mechanism in a single movement, all of the Tapematic machines have at least two different components performing these tasks, and they do so in a substantially different way. I find, therefore, that there is no literal infringement of the '123 Patent under Section 112, paragraph 6.

B. Doctrine of Equivalents

Where a claim does not literally "read on" an accused device because one or more limitations are not met exactly, infringement may be found if such limitations are satisfied equivalently. The accused device may then be said to perform substantially the same overall work to achieve substantially the same overall result by substantially the same means. *Johnston v. Ivac Corp.*, 885 F.2d at 1581. The doctrine of equivalents is not intended to extend or enlarge the scope of patent protection as defined by the claims. "[A] patentee should not be able to obtain, under the doctrine of equivalents, coverage which he could not lawfully have obtained from the [patent office] by literal claims." *Wilson Sporting Goods, Co. v. David Geoffrey & Associates, et al.*, 904 F.2d 677 (Fed.Cir. 1990). Rather, "application of the doctrine *expands the right to exclude* to 'equivalents' of what is claimed." *Id.* (Emphasis in original).

In the case of infringement under the doctrine of equivalents, the accused structure is compared with the claimed invention as a whole. *Texas Instruments v. U.S. Intern. Trade Com'n*, 805 F.2d 1558, 1571 (Fed.Cir.1986). This analysis does not mean that one can ignore claim limitations. Every element of the claim must still be present in order to find infringement under the doctrine of equivalents. The doctrine was not intended to forego the requirement that every element embodied in a claim (or its equivalent) must be present in the accused device in order to find infringement.

> . . . [I]n applying the doctrine of equivalents, each limitation must be viewed in the context of the entire claim. . . . "It is . . . well settled that each element of a claim is material and essential, and that in order for a court to find infringement, the plaintiff must show the presence of every element or its substantial equivalent in the accused device." *Lemelson v. United States,* 752 F.2d 1538, 1551 (Fed. Cir.1985). To be a "substantial equivalent," the element substituted in the accused device for the element set forth in the claim must not be such as would substantially change the way in which the function of the claimed invention is performed.

Pennwalt Corp. v. Durand-Wayland, Inc., 833 F.2d at 935 (1987), *quoting Perkin-Elmer Corp. v. Westinghouse Elec. Corp.,* 822 F.2d 1528, 1532-33 (Fed.Cir. 1987).

Thus, under the doctrine of equivalents analysis, "if a claim limitation or its substantial equivalent is not present, there can be no infringement." *Julien v. Zeringue,* 864 F.2d 1569, 1571, 9 U.S.P.Q.2d 1552 (Fed.Cir.1989). *See Corning Glass Works v. Sumitomo Elec. U.S.A., Inc.,* 868 F.2d 1251, 1259 (Fed.Cir.1989); *Pennwalt Corp. v. Durand-Wayland, Inc.,* 833 F.2d 931, 934-35, 4 U.S.P.Q. 1737 (Fed.Cir.1987) (en banc), *cert. denied,* 485 U.S. 961, 108 S.Ct. 1226, 99 L.Ed.2d 426 (1988), *and cert. denied,* 485 U.S. 1009, 108 S.Ct. 1474, 99 L.Ed.2d 703 (1988); *Lemelson v. United States,* 752 F.2d at 1551 (1985). The Federal Circuit in *Zeringue* dismissed as without merit the argument that the district court could ignore claim limitations and merely compare the claimed invention's overall operation and ideology with that of the accused. *Zeringue,* 864 F.2d at 1570.

Such an analysis, however, does not require equivalency in *components.* "One-to-one correspondence of components is not required, and elements or steps may be combined without *ipso facto* loss of equivalency. Each case must be decided in light of the nature and extent of the differences between the accused device and the claimed invention, on the equitable principles of the doctrine of equivalents." *Sun Studs, Inc.*

v. ATA Equipment Leasing, Inc., 872 F.2d 978, 989, 10 U.S.P.Q.2d 1338 (Fed.Cir.1989), *re'hng denied*, 892 F.2d 73 (1989) (citations omitted). Under the doctrine of equivalents, while "an equivalent must be found for every limitation of the claim somewhere in the accused device," there need not be a corresponding component, "although that is generally the case." *Corning Glass Works v. Sumitomo Elec. U.S.A., Inc.*, 868 F.2d 1251 (Fed.Cir.1989).[9]

In determining equivalents, consideration must be given to the purpose for which an ingredient is used in a patent, the qualities it has when combined with the other ingredients, and the function which it is intended to perform. An important factor is whether persons reasonably skilled in the art would have known of the interchangeability of an ingredient not contained in the patent with one that was. *Graver Tank & Mfg. Co. v. Linde Air Products*, 70 S.Ct. at 857 (1950). The question this Court must consider under the doctrine of equivalents is the same three-part test used for determining literal infringement under Section 112, paragraph 6: does the asserted equivalent perform substantially the same function in substantially the same way to accomplish substantially the

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[9] Plaintiff relies on *Sun Studs* for the proposition that it is legal error for the court to apply to the doctrine of equivalents the more limited scope of the literal infringement provisions of 35 U.S.C. § 112, 116, in that under the doctrine of equivalents, each step or element must be viewed in the context of the entire claim. *See Sun Studs*, 872 F.2d at 989. Martin O'Donnell, Trial day 27, p. 22. *Sun Studs*, however, does not change the legal rule that if a limitation is missing, there can be no infringement under either Section 112, paragraph 6, or doctrine of equivalents analyses. *Sun Studs* merely says that there may still be infringement under the doctrine of equivalents if a limitation performed by a single means in a claim is performed in the substantially same way in the accused device but by more than one means. *Compare 35* U.S.C. § 112, paragraph 6 (where "the sole question is whether the *single means* in the accused device which performs the function stated in the claim is the same as or an equivalent of the corresponding structure described in the patentee's specification as performing that function.") *D.M.I. v. Deere*, 755 F.2d 1570, 1575 (Fed.Cir. 1985). *See generally Stun Studs, Inc. v. ATA Equipment Leasing, Inc.*, 872 F.2d 978 (Fed. Cir. 1989).

same result? *Texas Instruments v. U.S. Intern. Trade Com'n*, 805 F.2d 1558 (Fed.Cir.1986).

'153 Patent

The analysis performed under Section 112, paragraph 6, is useful in our determination under the doctrine of equivalents. Even when comparing the accused structure with the claimed invention as a whole, this Court is convinced that the horizontal shift block assembly contained in all of the defendants' machines operates in a substantially different way than the pivoting swing arm assembly claimed by the '153 Patent in independent claims 2, 10 and 16. As a result, there is no infringement of the '153 Patent under the doctrine of equivalents.

'123 Patent

Claims 1 and 12 of the '123 Patent are also not infringed under the doctrine of equivalents. The leader extractor and positioner described in claims 1 and 12 does not find its substantial equivalent in any Tapematic machine. The differences in operation are insurmountable to a finding of infringement under the doctrine of equivalents. My analysis of these claims under Section 112, paragraph 6, equally supports my finding here.

Two pertinent elements in claim 30 of the '123 Patent are a "means for connecting said leader extractor member to a source of vacuum," and "means for reciprocally moving said leader extractor member so that the leader is withdrawn from said cassette by suction and positioned on said splicing block assembly as said leader extractor member is reciprocated toward and away from said cassette." Similarly, claim 35 describes a method for "withdrawing the leader from the cassette by a movable suction device and moving the suction device with the leader so as to position the withdrawn leader upon a splicing block assembly. . . ." The use of vacuum is a distinguishing feature in the way in which these functions are accomplished and the mechanical devices used by the 900

Series, Model 2,002 and the 3,000 Series are not its substantial equivalent. An object of the invention, as set forth in the specifications, is to provide an automated machine "wherein the leader is extracted from the blank cassettes by a leader extractor *which utilizes only suction to withdraw the leader from the cassette* and which is adapted to precisely and rapidly position the leader on the splicing block assembly." Plaintiff's Exh. 45; col. 2, lines 11-17. (Emphasis added). For this reason, as well as those set forth in my analysis under literal infringement, pursuant to Section 112, paragraph 6, I find that the extracting and positioning mechanisms of the Tapematic machines do not operate in substantially the same way as the means claimed in the '123 Patent.

Plaintiff argues that because the function and result of the mechanisms are the same, the way in which it achieves this result should be examined in light of the similarities of these other criteria. But prevailing patent law is otherwise:

> Perkin-Elmer's repeated assertions that the claimed and accused devices perform substantially the same function and achieve substantially the same end result are not helpful. That circumstance is commonplace when the devices are sold in competition. That a claimed invention and an accused device may perform substantially the same function and may achieve the same result will not make the latter an infringement under the doctrine of equivalents where it performs the function and achieves the result in a substantially different way. *Graver Tank & Mfg. Co. v. Linde Air Products Co.*, 339 U.S. 605, 608, 70 S.Ct. 854, 856, 94 L.Ed. 1097, 85 U.S.P.Q. 328, 330 (1950); *see, e.g., Sealed Air Corp. v. U.S. International Trade Com.*, 645 F.2d 976, 984, 209 U.S.P.Q. 469, 476 (CCPA 1981).

Perkin-Elmer Corp. v. Westinghouse Electric Corp., 822 F.2d 1528, 1531 n. 6, 3 U.S.P.Q.2d 1321, 1323-24 n. 6 (Fed.Cir. 1987). *Accord Corning Glass Works v. Sumitomo Elec. U.S.A., Inc.*, 868 F.2d 1251, 1258 (Fed.Cir.1989).

Defendants' machines have another important component which is substantially different than its counterpart described in the '123 Patent. The mechanism for storing a plurality of cassettes to be loaded and for advancing them one at a time to the loading station contained in clauses in independent claims 1, 12 and 35 of the '123 Patent consists of an elephant trunk type magazine which requires all of the cassettes to be placed in the magazine with the opening for the leader tape facing in the same forward direction. Defendants' 900 Series and Model 2,002 machines consist of a vertical magazine allowing the cassettes to be placed in the magazine with the opening for the leader tape facing in either of two directions, but necessitating an orientation device to position the cassette in the proper position prior to forwarding the cassette to the loading station. Defendants' 3,000 Series has a vertical magazine which releases tapes by way of a pivoting door which allows each tape to fall along a guide in an arch motion. Two C-shaped supports then pick up the cassette and carry it to the loading position.

With regard to the magazine cassette feeding system, the claims of the '123 Patent are limited in scope by U.S. Patent No. 3,814,343 issued to W.P. Bennett (the "Bennett Patent"). The specifications of the '123 Patent describe its magazine assembly as an improvement over that disclosed in the Bennett Patent, which requires the orientation device.

> [The Bennett machine] utilizes a cassette receiver, which is movable bidirectionally in two different modes, for receiving cassettes one at a time from a cassette storage magazine and positioning the received cassette in a selected tape loading position. Such a receiver is costly, space consuming, and requires a complicated drive means for causing the receiver to move in either of two directions in each of its two possible modes of movement. Plaintiff's Exh. 45; col. 2, lines 42-51.

A specific object of the '123 Patent, as set forth in its specifications, is to overcome and avoid the limitations of the

machine described in the Bennett Patent. By avoiding the need for an orientation device, the '123 Patent was intended to have a more efficient, less costly way in which to store and advance cassettes. But distinguishing itself from magazine assemblies which require an orientation device, the '123 Patent became limited to protection against tape loaders which avoid the very magazine assembly Tapematic employs.

I find that the magazine assemblies of the Tapematic machines operate in a substantially different way than that described in claims 1, 12 and 35 of the '123 Patent. The Tapematic 900 Series and Model 2,002 magazine assemblies do not avoid the orientation device and in fact depend upon it for its speed and efficiency in advancing cassettes. The same language that provides legitimacy to the '123 Patent claims precludes a finding of infringement here, under either the doctrine of equivalents or Section 112, paragraph 6. *See generally Wilson Sporting Goods, supra.*

As for the 3,000 Series, although the magazine feeding assembly does not have an orientation device, this Court finds that its total operation is so substantially different from that claimed in the '123 Patent, that it belies reality to suggest it could be an equivalent. In sum, I find that none of the Tapematic machines at issue infringe the '123 patent, either literally, or under the doctrine of equivalents.

V. *Other Matters*

Plaintiff has also alleged that Defendant Perego willfully infringed plaintiff's patents. Willful infringement is a question of fact which must be proven by clear and convincing evidence in order to increase damages. *Shatterproof Glass Corp. v. Libbey-Owens Ford Co.*, 758 F.2d 613, 628, 225 U.S.P.Q. 634 (Fed.Cir.), *cert. dismissed*, 474 U.S. 976, 106 S.Ct. 340, 88 L.Ed.2d 326 (1985); *Windsurfing International, Inc. v. Fred Ostermann GmbH*, 668 F.Supp. 812, 813, 4 U.S.P.Q.2d 1429 (S.D.N.Y.1987). Plaintiff has failed to present any evidence which could lead a factfinder to find

willful infringement. Similarly lacking is any credible evidence that plaintiff is guilty of patent misuse.

VI. *Damages*

Any infringement tends to dampen the fires of creativity so necessary to the vitality of society, economic and otherwise. The law is the protector of the inventor's delicate genius and nourishes its growth and development.

To receive lost profits as a measure of damages, the patent owner must show that there was a reasonable probability that, but for the infringement, it would have made the infringer's sales. *State Industries, Inc. v. Mor-Flo Industries, Inc.*, 883 F.2d 1573, 1577, 12 U.S.P.Q.2d 1026 (Fed.Cir.1989), *re'hng denied*, 1989 WL 99825, 1989 US. App. LEXIS 16,954 (1989), *cert. denied*, ___ U.S., ___, 110 S.Ct. 725, 107 L.Ed.2d 744 (1990); *King Instrument Corp. v. Otari Corp.*, 767 F.2d 853, 863 (Fed.Cir.1985). Where, as here, there are more than two suppliers of the subject product in the market, lost profits may be calculated according to the patent owner's market share. *State Industries, Inc. v. Mor-Flo Industries, Inc.*, 883 F.2d 1573 (Fed.Cir.1989).

In reaching the amount of damages to which plaintiff is entitled, the Court considers the following: (1) the number of lost sales; (2) the gross receipts plaintiff would have obtained from the lost sales had there been no infringement; (3) the cost of sales to be deducted from gross receipts; and (4) plaintiff's profit on the lost sales.

In the years before defendants' infringement, King controlled 70 percent of the tapeloader market.[10] Defendants are responsible for seventy-seven infringing machines sold either directly into the United States or by their agent, Alex Novotny, between the years 1983 and 1989. 35 U.S.C.

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10 "[T]he use of the patent owner's profit margin, unaffected by the infringing sales, is necessary to estimate what the patent owner's lost profits would have been had there never been an infringement." *King*, 767 F.2d at 864.

§§ 271(a) and (b). Plaintiff argues that, had defendants not infringed, there is a reasonable probability that King would have made 70 percent of defendants' sales, which would amount to fifty-four machines. Defendants assert, however, that the infringing Model 2,002 was a double pancake machine[11] and that because King did not have a successful double pancake model, it would not have made the sales defendants made. Neither argument is wholly convincing.

The King Model 790, during the years of infringement and continuing to date, has been a successful, high speed single pancake tapeloader, principally responsible for King's large share of the market. Had defendants' double pancake machine not been available, the demand for tapeloaders would have been filled by whatever else was on the market. Considering that King controlled 70 percent of the market, King could have made 70 percent of those sales.

Defendants argue that their customers were not in the market for a single pancake loader, and, had the Model 2,002 been unavailable, they would not have bought a single pancake loader. The evidence does not support the finding that all of defendants' customers were upgrading to double pancake machines, and had one not been available, would have been content to stay with their present running capacity. It is possible, however, that *some* of defendants' customers were so upgrading. This Court believes that there is a reasonable probability that five buyers of the Model 2,002 machine were in the market for a double pancake loader only and would not have bought a single pancake loader had a double not been available. *See Gyromat Corp. v. Champion Spark Plug Co.*, 735 F.2d 549, 553, 222 U.S.P.Q. 4 (Fed.Cir. 1984). But this Court still finds that King would have made forty-nine of defendants' sales had they not infringed, and is entitled to its lost profits on those lost sales.

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[11] Double pancake machines have two reels of magnetic tape so that when one reel is empty the machine is automatically fed from the second reel of magnetic tape thus avoiding down time for changing reels.

In determining lost profits, courts rely on what has become known as the "incremental income" approach. *Paper Converting Machine Co. v. MagnaGraphics Corp.*, 745 F.2d 11, 22, 223 U.S.P.Q. 591 (Fed.Cir.1984). This approach recognizes that once fixed costs have been paid, it does not cost as much to produce additional units. I find that King had the capacity during the period of infringement to produce forty-nine additional tapeloaders without a significant increase in fixed costs, such as management salaries, property taxes and insurance. Thus those costs which do not vary with increases in production are excluded when determining profits.

The Court's findings as to lost profits are as follows: The price of the King Model 790 that plaintiff would have sold had defendants not infringed was $24,000.00. King's profit margin was approximately 60 percent, or $14,400.00 per King machine. For the forty-nine machines King would have sold, King is entitled to $705,600.00 in lost profits. With regard to spare parts, I find that, on the average, King's profit on spare parts per machine was approximately $3,591.00. King is entitled to $176,000.00 in damages for lost profits on the spare parts it would have sold for the forty-nine machines, had defendants not infringed.

King also asserts that, for the 30 percent of defendants' infringing sales that would have gone to the rest of the tapeloader market, it is entitled to lost profits on those machines as well. King argues that, if the rest of the tapeloader market also infringe its patents, then defendants may not benefit because of the infringement of others. There is no evidence, however, and plaintiff did not assert that any of the tapeloaders representing the rest of the market infringed the '461 Patent. Therefore, the twenty-three Tapematic machines that would have been sold by others in the market were acceptable noninfringing alternatives. King is entitled to a reasonable royalty of five percent of the sales price of twenty-three Tapematic Model 2,002 machines. Whereas the Tapematic 2,002 sold for $22,000.00 per machine, King is entitled to $1,100.00 per machine, or

$25,300.00, as a reasonable royalty on twenty-three machines. Furthermore, plaintiff is entitled to prejudgment interest at the rate of 11 percent.

VII. *Conclusion*

For the reasons discussed above, the Court concludes that defendants infringed the '461 Patent and plaintiff is entitled to the damages caused thereby, interest and costs. The Court also finds no infringement of the '153 Patent and the '123 Patent.

SO ORDERED.

UNITED STATES COURT OF APPEALS
FOR THE FEDERAL CIRCUIT

Filed December 5, 1995

ORDER

A combined petition for rehearing and suggestion for rehearing in banc having been filed by the CROSS-APPELLANT, and a response thereto having been invited by the court and filed by the APPELLANT, and the petition for rehearing having been referred to the panel that heard the appeal, and thereafter the suggestion for rehearing in banc and the response having been referred to the judges who are in regular active service and who are authorized to request a poll whether to rehear the appeal in banc, and a poll having been requested, taken, and failed,

UPON CONSIDERATION THEREOF, it is

ORDERED that the petition for rehearing be, and the same hereby is, DENIED, and it is further

ORDERED that the suggestion for rehearing in banc be, and the same hereby is, DECLINED.

A separate dissent was filed by Senior Circuit Judge NIES.

Chief Judge ARCHER would rehear the appeal in banc.

The mandate of the court will issue on December 12, 1995.

FOR THE COURT,
FRANCIS X. GINDHART, CLERK

Dated: December 5, 1995

By DIANE M. FRYE
Diane M. Frye
Chief Deputy Clerk

UNITED STATES COURT OF APPEALS
FOR THE FEDERAL CIRCUIT

91-1125

KING INSTRUMENT CORPORATION,

Plaintiff-Appellant,

—v.—

LUCIANO PEREGO and TAPEMATIC,

Defendants/Cross-Appellants.

NIES, *Senior Circuit Judge*, dissenting to denial of panel rehearing.

I urge rehearing for further argument on the legal ruling of the panel majority that a patentee may recover damages for an infringer's interference with the patentee's market in unpatented goods. In my view, based on extensive precedent, damages may legally be obtained only for injury to patent rights. Patent rights are readily identifiable, being the rights granted by the patent which the patentee is entitled to license. A patent owner obtains no right from its patent to license goods in the public domain. Moreover, the patentee may not tie a license to use its patented invention to the payment of tribute on unpatented goods. *See, e.g., Morton Salt Co. v. G.S. Suppiger Co.*, 314 U.S. 488 (1942).

That the tribute is labelled "damages" does not give it legitimacy. From its inception, this suit has been no more than a device for exploitation of the patentee's market in unpatented

goods. As stated *in Leitch Mfg. Co. v. Barber Co.*, 302 U.S. 458, 463 (1938):

> [E]very use of a patent as a means of obtaining a limited monopoly on unpatented material is prohibited. It applies whether the patent be for a machine, a product, or a process. It applies whatever the nature of the device by which the owner of the patent seeks to effect unauthorized extension of the monopoly.

Contrary to the cited precedent, the award of damages sanctioned in this case effects a market monopoly on unpatented goods during the period of infringement.

All precedent of the Supreme Court and all other circuits, more fully cited in my principal dissent,* limits lost profit damages to profits attributable to the patented invention and, where, as here, the patented invention is a component of a device, requires proof that the patented component created the demand for the entire device in accordance with the "entire market value rule." *Westinghouse Co. v. Wagner Mfg. Co.*, 225 U.S. 604, 615 (1912). The opinion of the majority does not acknowledge the applicability of this precedent. It simply ignores the absence of proof and the absence of a finding that the patented component of the infringer's product gave the market value to the entire device as well as to spare parts. *Rite-Hite Corp. v. Kelley Co.*, 56 F.3d 1538, 1549, 35 USPQ2d 1065, 1072 (Fed. Cir.) *(in banc)* (Nies, J., dissenting), *cert. denied,* 116 S. Ct. 184 (1995). In effect, the majority converts patent infringement into a species of unfair competition claim. It holds that a patent does not, as heretofore, merely protect the patentee's property rights arising from the patent. Rather, a patent erects a property fence around the patentee's entire business with respect to damages. However, the patent power may not be used to enact a general

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* *King Instrument Co. v. Perego*, 65 F.3d 941, 953, 36 USPQ2d 1129, 1138 (Fed. Cir. 1995). *See also Rite-Hite Corp. v. Kelley Co.*, 56 F.3d 1538, 1556, 35 USPQ2d 1065, 1078 (Fed. Cir.) *(in banc)* (Nies, J., dissenting), *cert. denied,* 116 S. Ct. 184 (1995).

law of unfair competition protecting a patentee's unpatented business. *See The Trade-Mark Cases,* 100 U.S. 82, 94 (1879) (Act of 1870 providing for federal protection of trademarks after registration in U.S. Patent Office declared unconstitutional as invalid exercise of patent power.)**

This court recently expanded legal injury for patent infringement to cover lost profits tied to a patent owner's business under a related patent. *Rite-Hite Corp. v. Kelley Co.,* 56 F.3d 1538, 35 USPQ2d 1065 (Fed. Cir.) *(in banc), cert. denied,* 116 S. Ct. 184 (1995). I can only conclude that in denying *certiorari,* the Supreme Court had not been made aware of the significance of the fundamental change in patent rights made by the *Rite-Hite* decision. The *Rite-Hite* decision presents, in my view, the most profound departure from basic patent law concepts that any court has ever pronounced. Moreover, as the decision in this case indicates, the *Rite-Hite* decision was not an aberration—a one-time occurrence. *Rite-Hite* provides the jumping off place for further extensions of damages beyond injury to patent rights. If the constitutional power permits this perversion of patent infringement damages, and I believe it does not, it is for Congress to make this policy choice, not judges whose ruling rests on their own view that the remedies provided by Congress are inadequate recompense for patent infringement.

Rehearing should have been granted at least to afford the appellant an opportunity to present arguments that the *Rite-Hite* damages theory was improperly applied to this case and improperly expanded. In addition, on rehearing the views of the Department of Justice on the constitutionality and antitrust implications of this ruling by the panel could have been obtained. A more informed decision would be rendered.

** Trademark infringement is a form of unfair competition. RESTATEMENT (THIRD) OF UNFAIR COMPETITION, § 9, Comment c, pp. 77-78 (1995).

UNITED STATES COURT OF APPEALS
FOR THE FEDERAL CIRCUIT

Filed January 13, 1994

91-1125, -1132

KING INSTRUMENT CORPORATION,

Plaintiff-Appellant,

—v.—

LUCIANO PEREGO and TAPEMATIC,

Defendants/Cross-Appellants.

ORDER

The appeals, having been heard by a panel of the court and, thereafter, a majority of the circuit judges who are in regular active service having acted sua sponte in accordance with 28 U.S.C. § 46(c) and Fed. R. App. P. 35(a),

IT IS ORDERED that the appeals shall be decided in banc.

The parties will be advised in due course if additional briefing and oral argument will be required.

FOR THE COURT

/s/ FRANCIS X. GINDHART
Francis X. Gindhart
Clerk

Dated: January 13, 1994

UNITED STATES COURT OF APPEALS
FOR THE FEDERAL CIRCUIT

Filed July 10, 1995

91-1125, -1132

KING INSTRUMENTS CORPORATION,

Plaintiff-Appellant,

—v.—

LUCIANO PEREGO and TAPEMATIC,

Defendants/Cross-Appellants.

ORDER

Before ARCHER, *Chief Judge*, RICH, NIES, NEWMAN, MAYER, MICHEL, PLAGER, LOURIE, CLEVENGER, RADER, SCHALL, and Bryson, *Circuit Judges*.

PER CURIAM.

The appeals, having originally been submitted to a panel of the court and, thereafter, it having been ordered that the appeals should be decided in banc,

IT IS ORDERED that the appeals shall be decided by the panel to which they were originally submitted.

For the Court:

/s/ FRANCIS X. GINDHART
Francis X. Gindhart
Clerk

Dated: July 10, 1995

35 U.S.C. § 284

Upon finding for the claimant the court shall award the claimant damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer, together with interest and costs as fixed by the court.

When the damages are not found by a jury, the court shall assess them. In either event the court may increase the damages up to three times the amount found or assessed.

The court may receive expert testimony as an aid to the determination of damages or of what royalty would be reasonable under the circumstances.

U.S. Constitution Article I, Section 8, Clause 8

The Congress shall have Power . . . To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries . . .